01786

A-1

Sierra 920A

ERROR TEST SET

INSTRUMENT REPAIR SERVICE, INC
3135 REPS MILLER RD.
NORCROSS, GA. 30071

SCHEMATIC DIAGRAMS AND PARTS LIST

PHILCO Ford
Philco-Ford Corporation
Sierra Electronic Operation

3885 Bohannon Drive
Menlo Park, California 94025
(415) 322-7222/TWX: 910-373-1282

Sierra 920A

ERROR TEST SET

SCHEMATIC DIAGRAMS
AND
PARTS LIST

INSTRUMENT REPAIR SERVICE, INC.
3135 REPS MILLER RD.
NORCROSS, GA 30071

SCHEMATIC DIAGRAMS

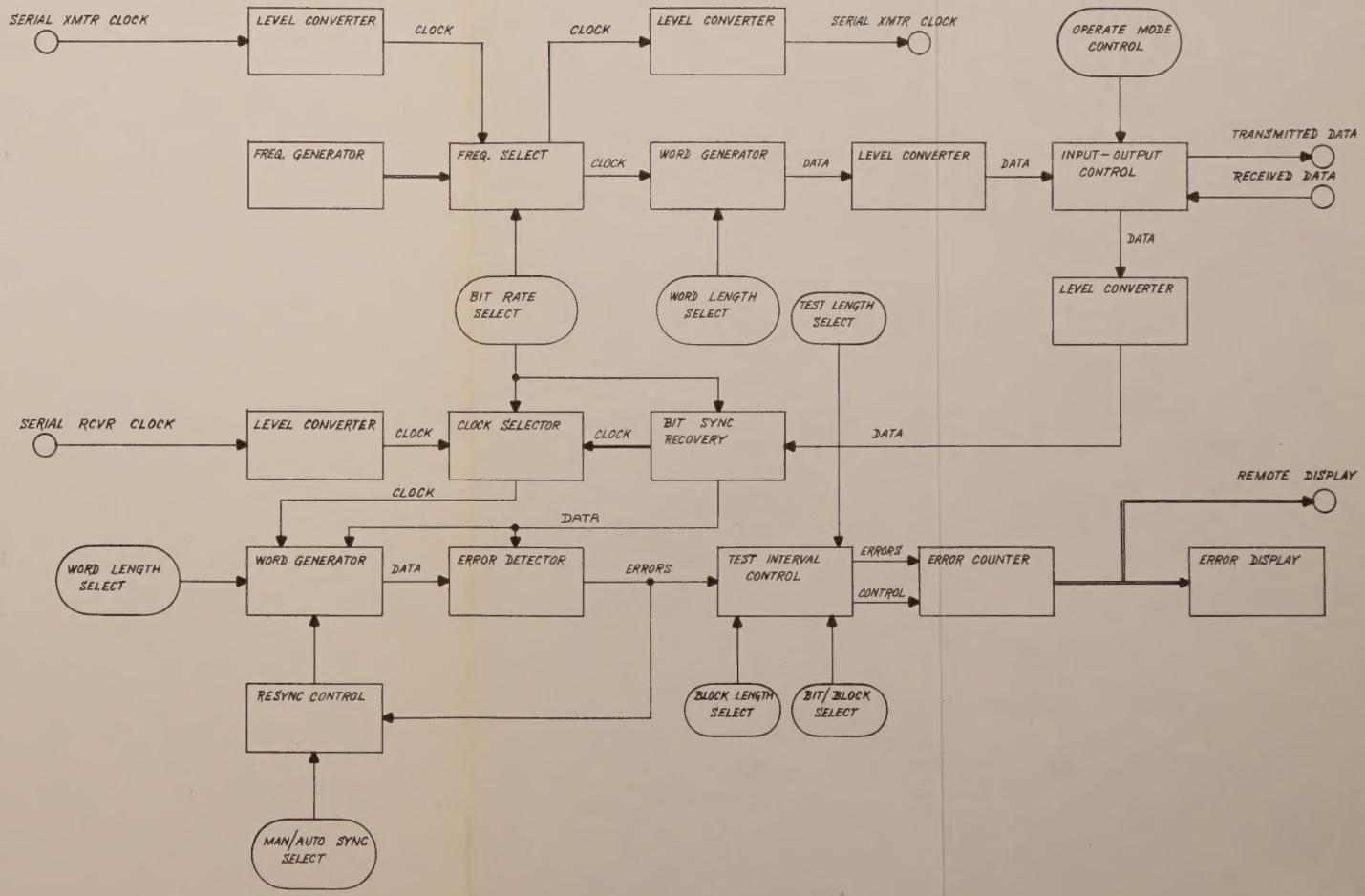


Figure 1. Sierra 920A Error Test Set, Block Diagram

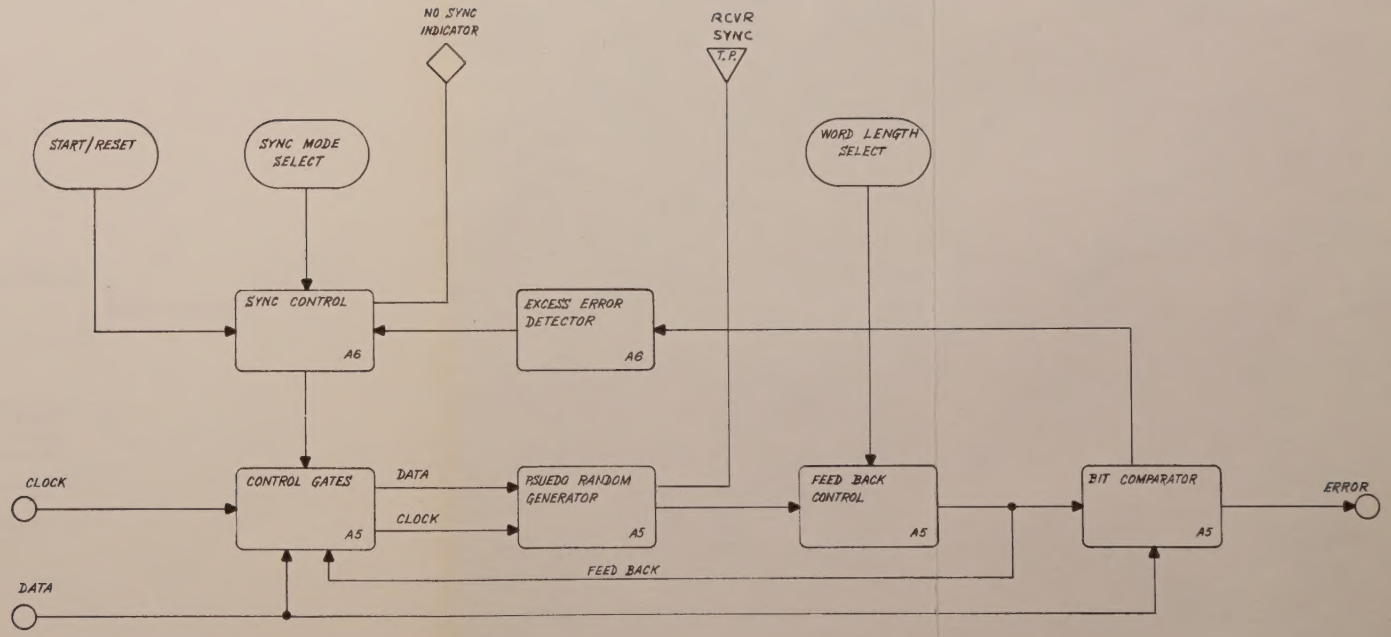


Figure 2. Sierra 920A Receiver Word Generator, Block Diagram

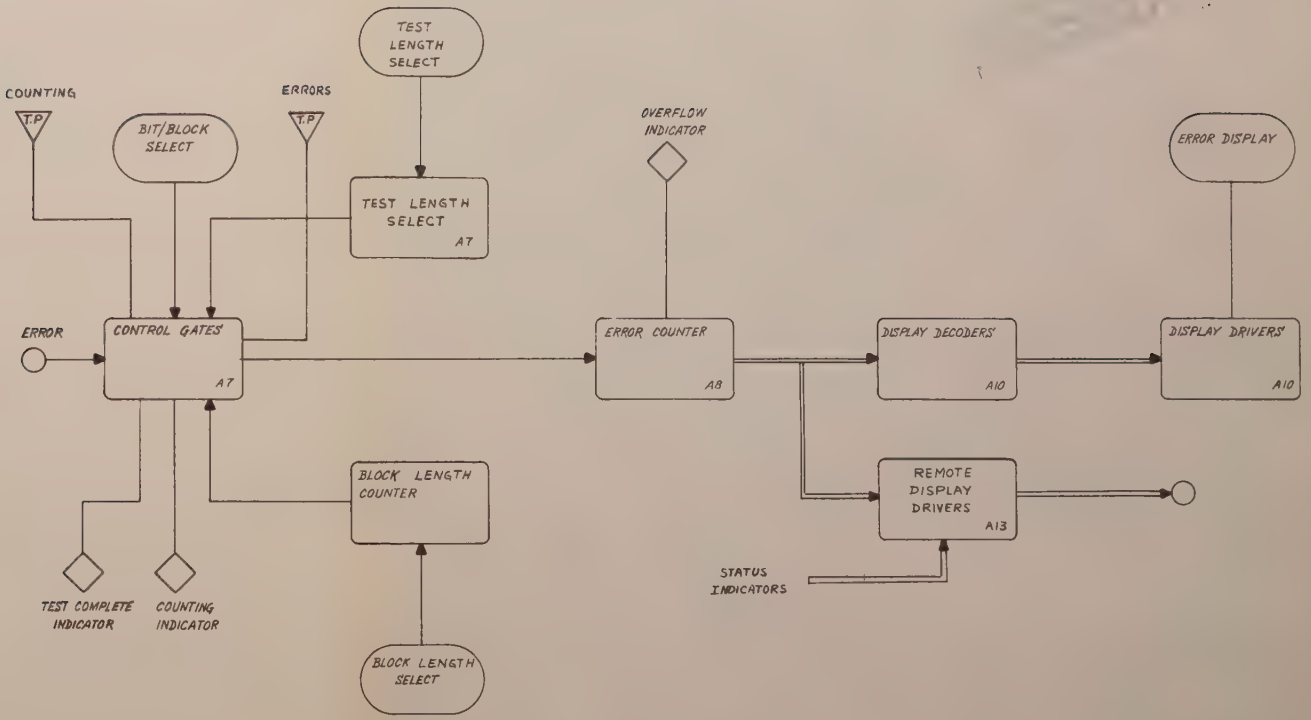


Figure 3. Sierra 920A Error Counter and Control, Block Diagram

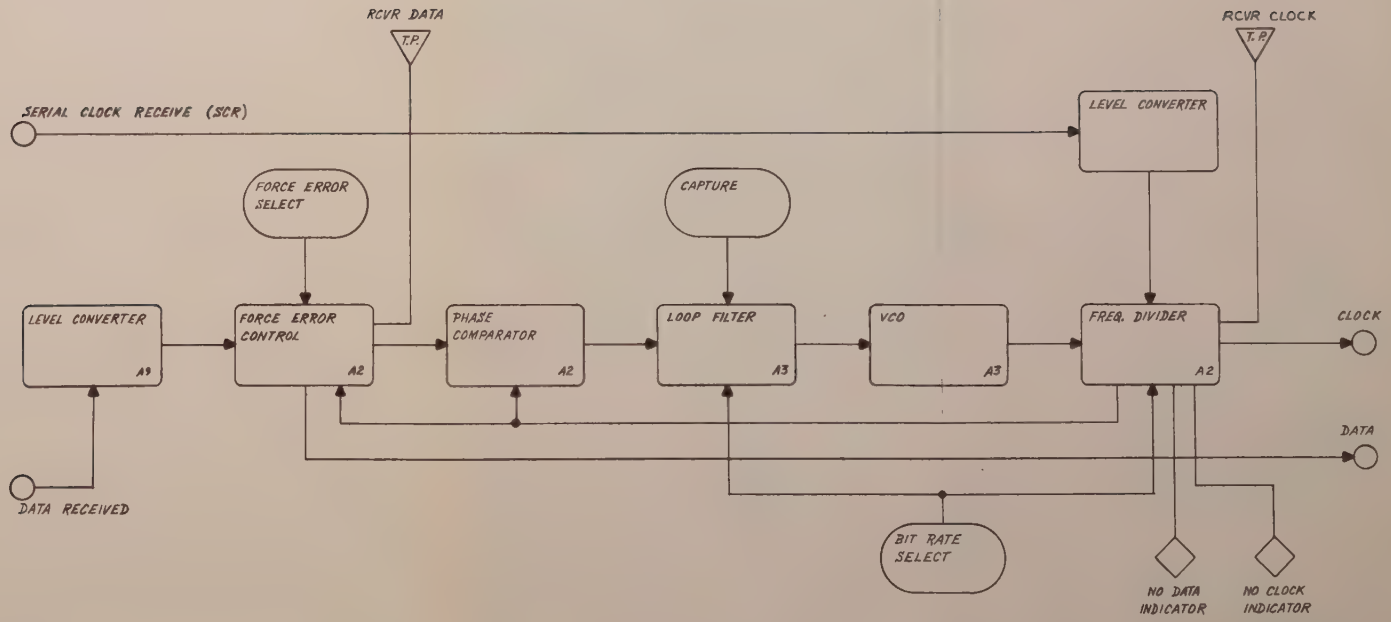


Figure 4. Sierra 920A Receiver Clock Generator, Block Diagram

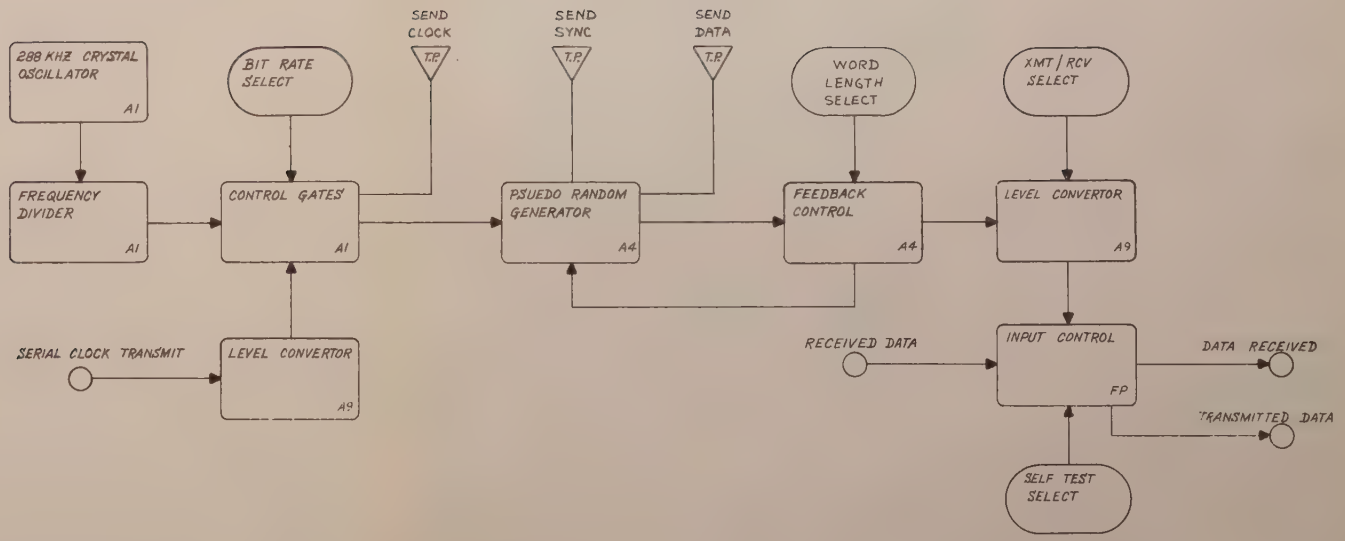
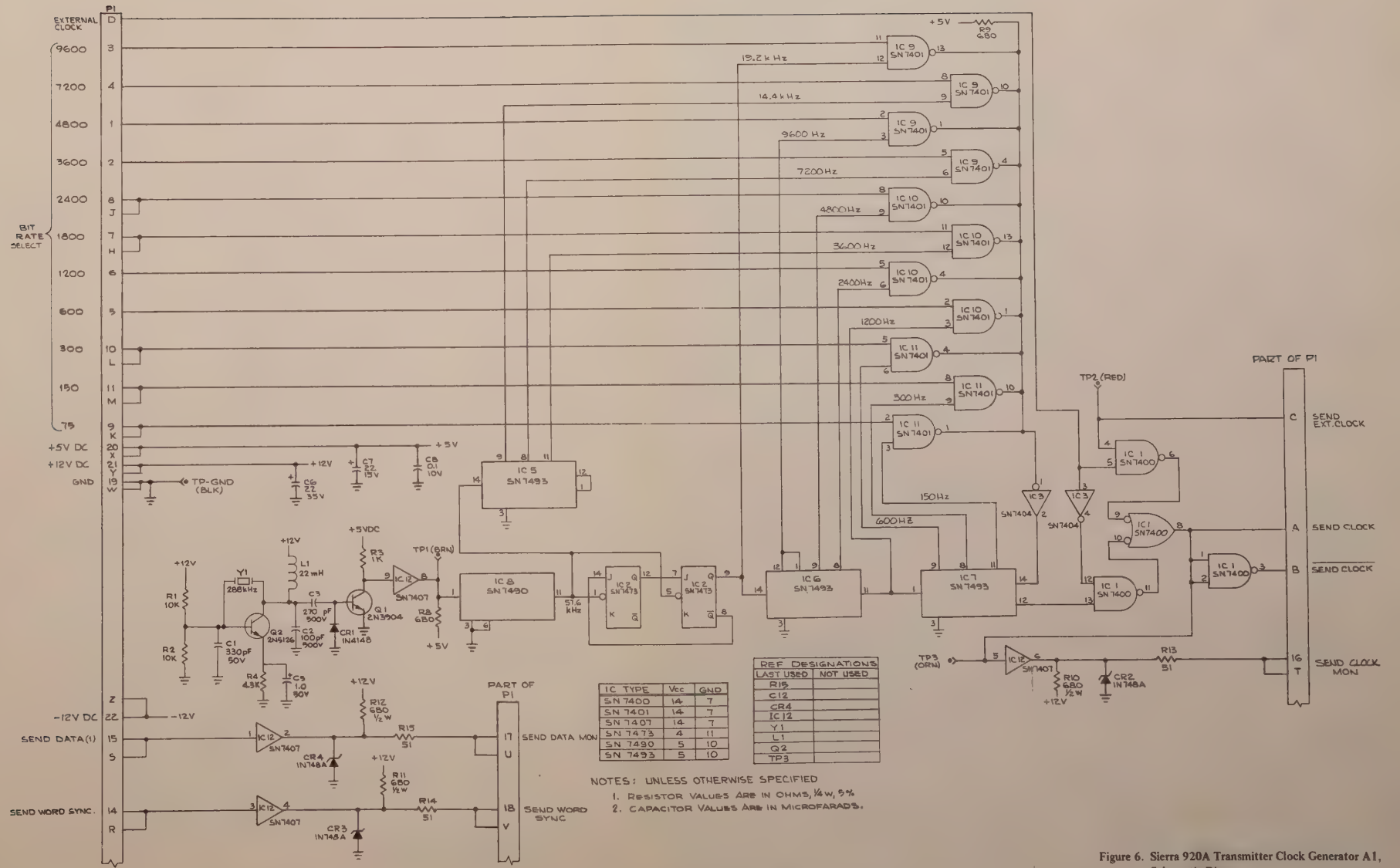


Figure 5. Sierra 920A Transmitter Section, Block Diagram

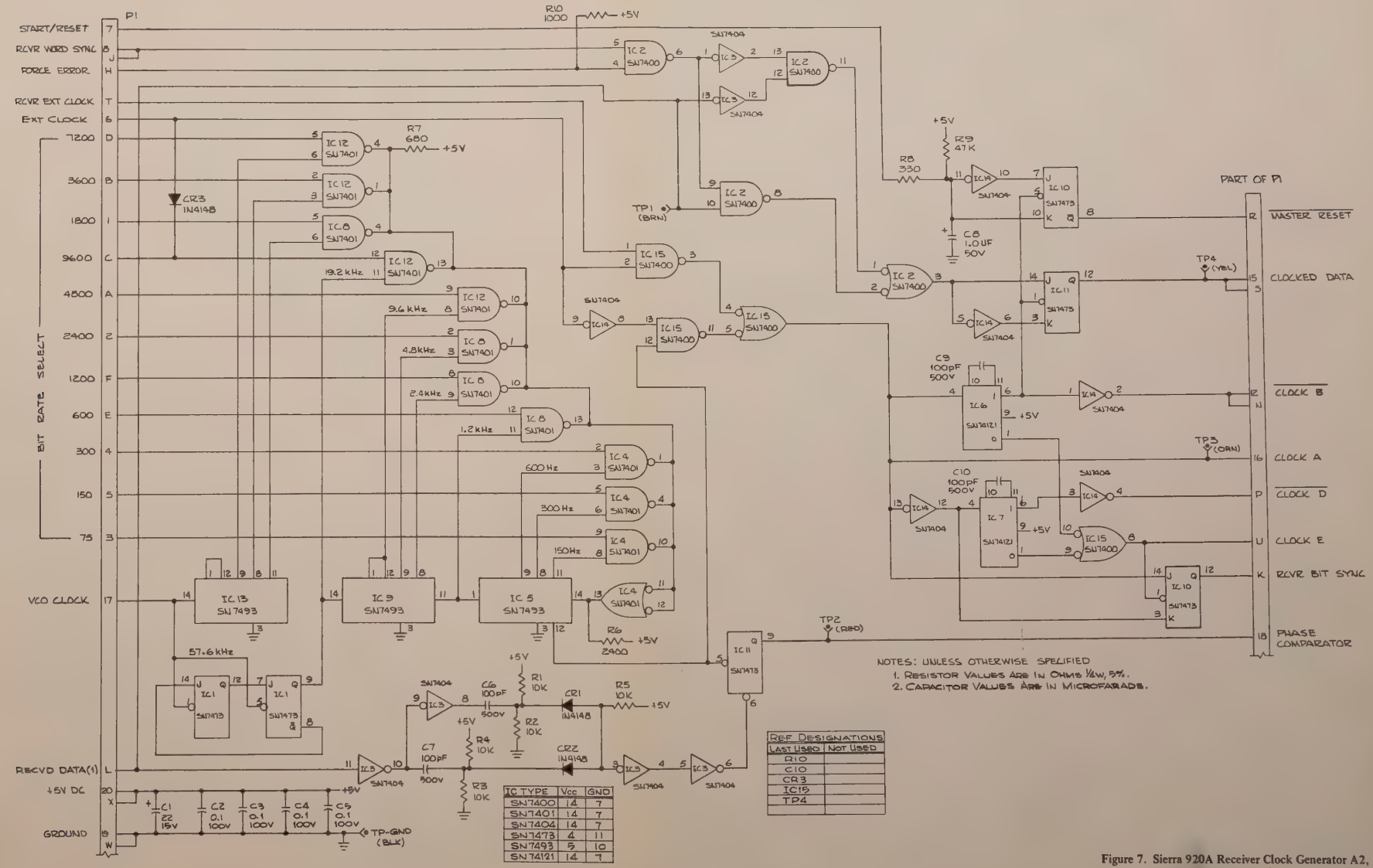


IC TYPE	Vcc	GND
SN 7400	14	7
SN 7401	14	7
SN 7407	14	7
SN 7473	4	11
SN 7490	5	10
SN 7493	5	10

REF DESIGNATIONS	
LAST USED	NOT USED
R15	
C12	
CR4	
IC12	
Y1	
L1	
Q2	
TP3	

NOTES: UNLESS OTHERWISE SPECIFIED
1. RESISTOR VALUES ARE IN OHMS, ¼W, 5%
2. CAPACITOR VALUES ARE IN MICROFARADS.

Figure 6. Sierra 920A Transmitter Clock Generator A1, Schematic Diagram

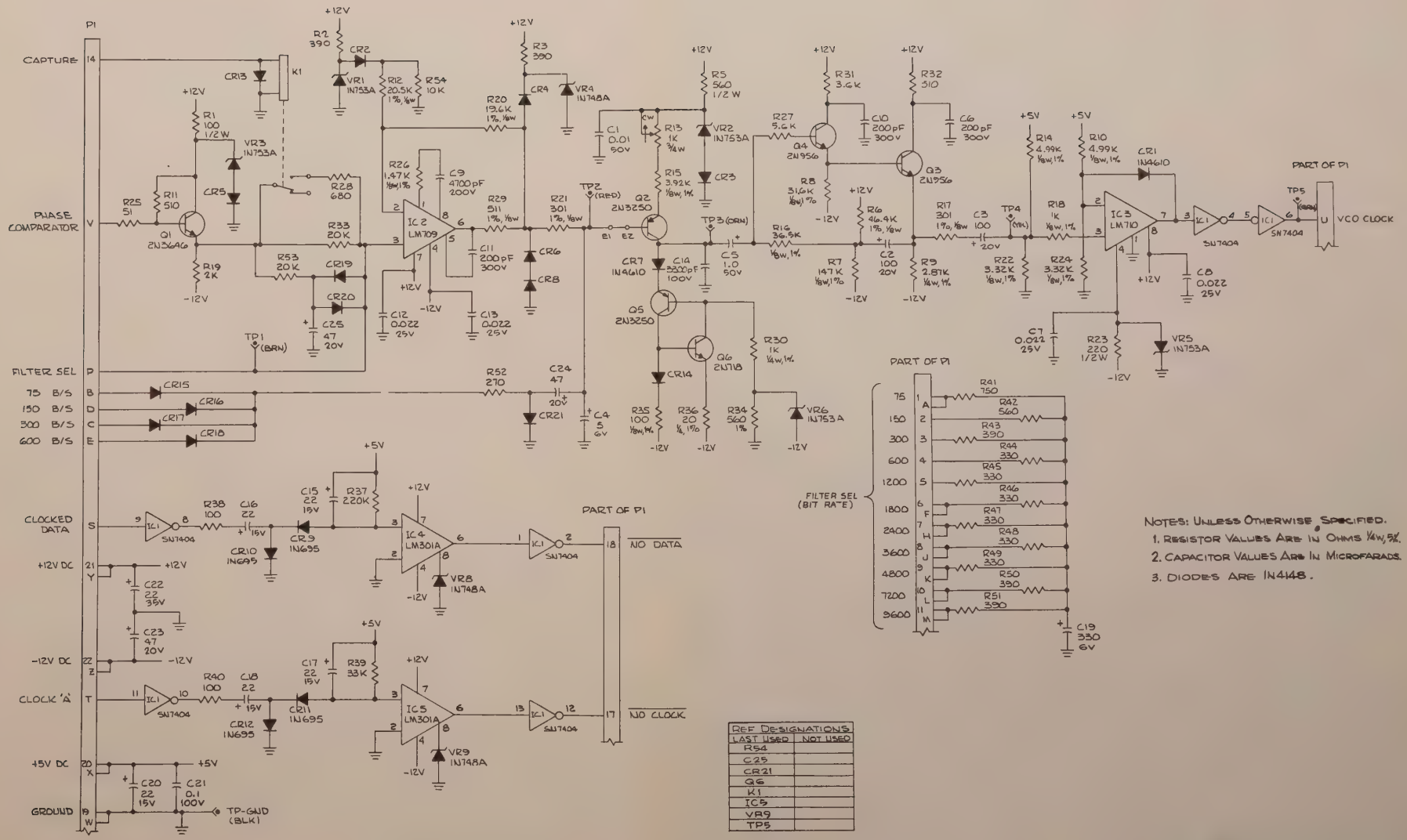


NOTES: UNLESS OTHERWISE SPECIFIED
1. RESISTOR VALUES ARE IN OHMS ¼W, 5%.
2. CAPACITOR VALUES ARE IN MICROFARADS.

REF DESIGNATIONS	
LAST USED	NOT USED
R10	
C10	
CR3	
IC15	
TP4	

IC TYPE	Vcc	GND
SN7400	14	7
SN7401	14	7
SN7404	14	7
SN7473	4	11
SN7493	5	10
SN74121	14	7

Figure 7. Sierra 920A Receiver Clock Generator A2, Schematic Diagram



NOTES: UNLESS OTHERWISE SPECIFIED.
1. RESISTOR VALUES ARE IN OHMS 1/4W, 5%.
2. CAPACITOR VALUES ARE IN MICROFARADS.
3. DIODES ARE 1N4148.

REF DESIGNATIONS	
LAST USED	NOT USED
R54	
C25	
CR21	
Q6	
K1	
IC5	
VR9	
TP5	

Figure 8. Sierra 920A Receiver Clock Recovery A3, Schematic Diagram

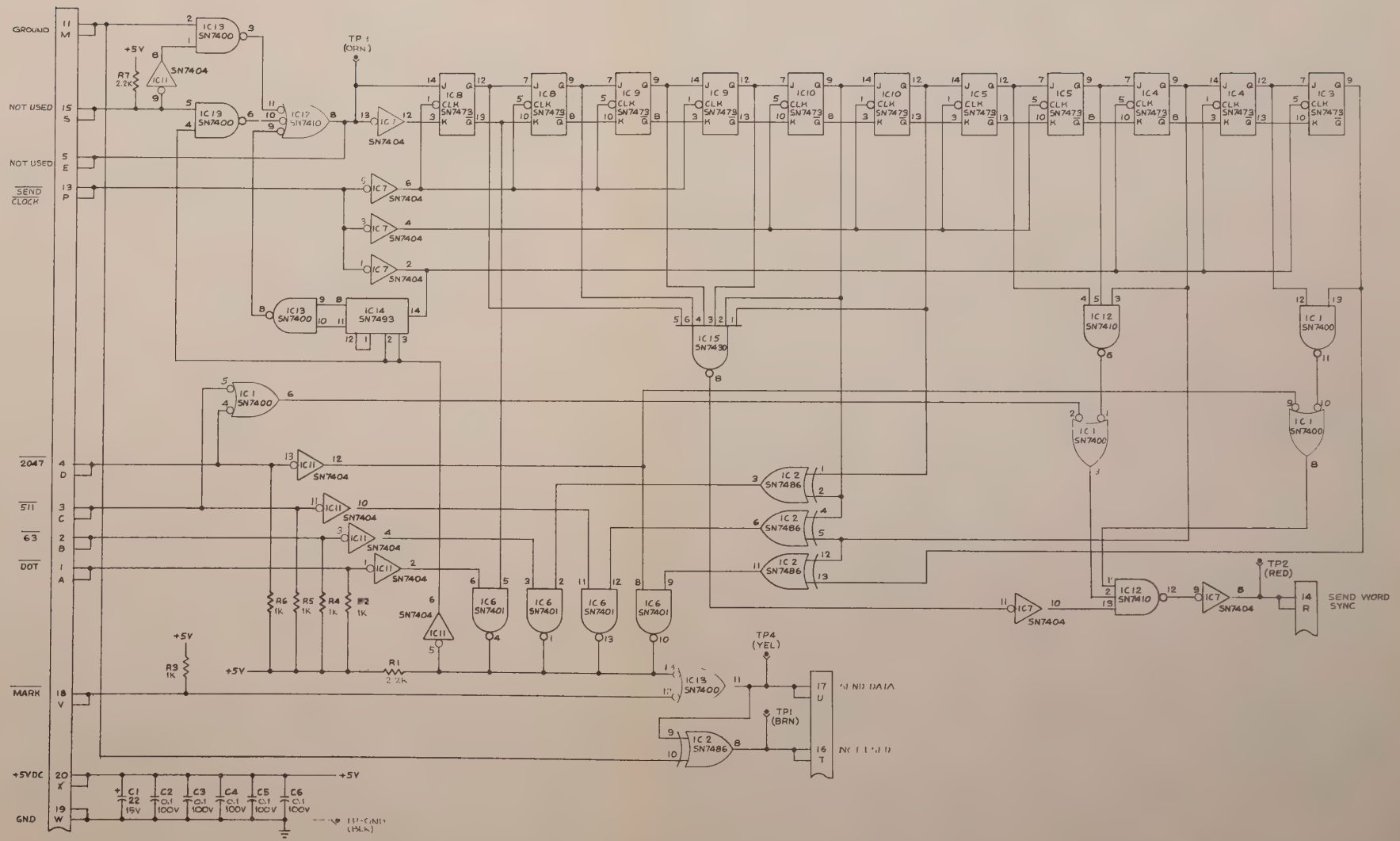


Figure 9. Sierra 920A Pseudo-Random Generator Transmitter A4, Schematic Diagram (Sheet 1 of 2)

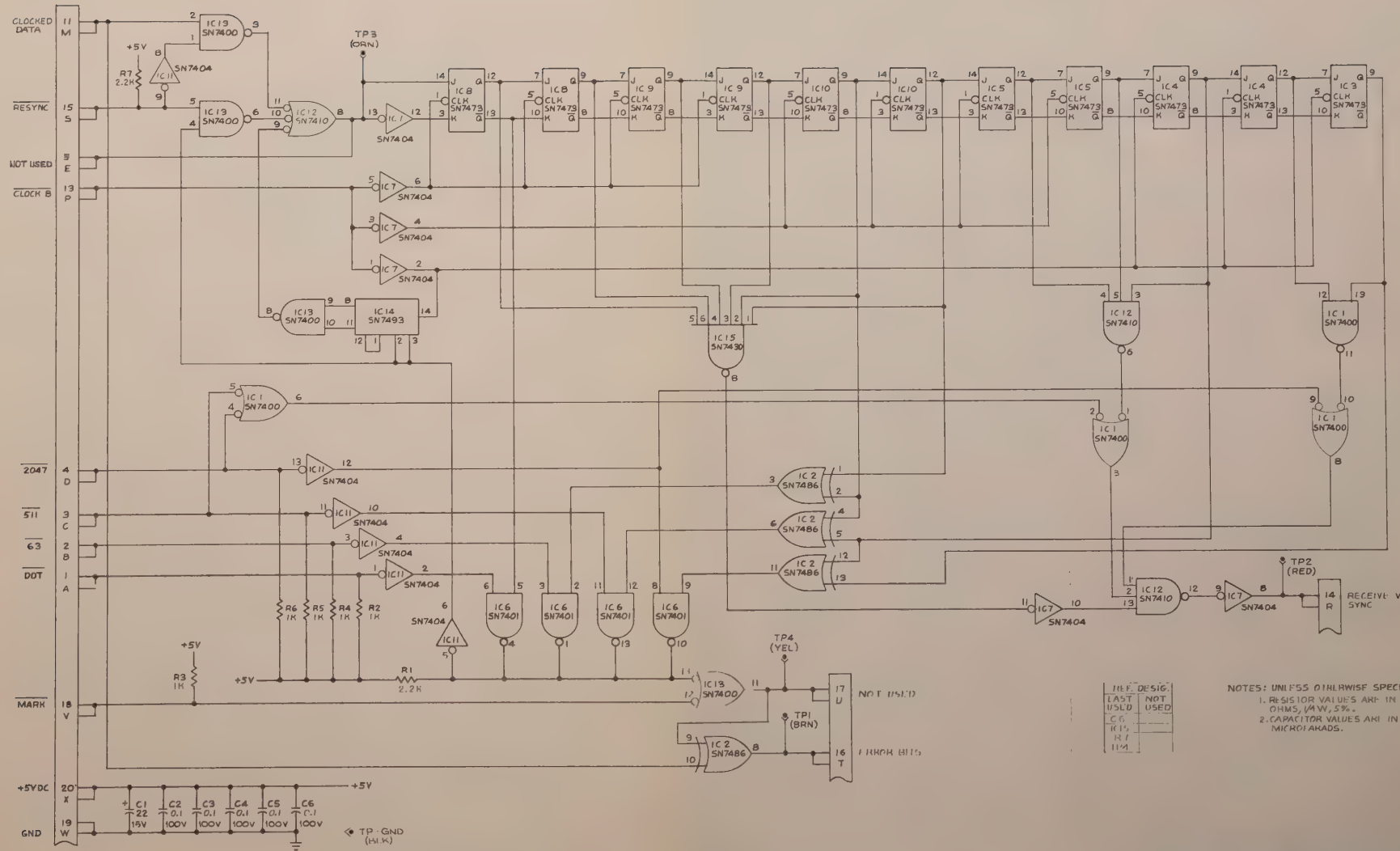
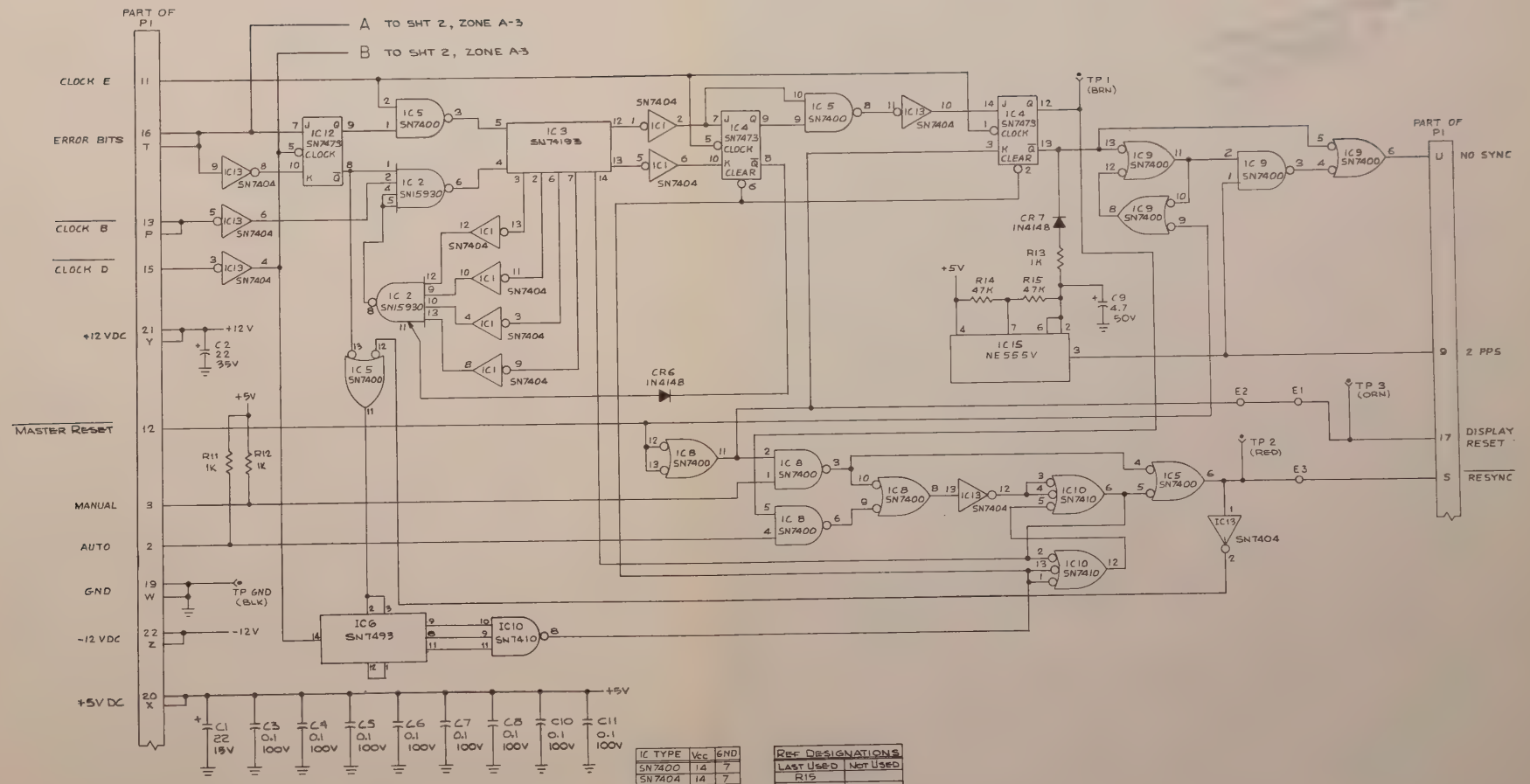


Figure 9. Sierra 920A Pseudo-Random Generator Receiver A5, Schematic Diagram (Sheet 2 of 2)



IC TYPE	Vcc	GND
SN7400	14	7
SN7404	14	7
SN7407	14	7
SN7410	14	7
SN7473	4	11
SN15930	14	7
SN7493	5	10
SN74193	16	8
NE555V	8	1

REF DESIGNATIONS	
LAST USED	NOT USED
R15	
C11	
CR7	
IC15	
TP4	

NOTES: UNLESS OTHERWISE SPECIFIED.
1. RESISTOR VALUES ARE IN OHMS, ¼w, 5%.
2. CAPACITOR VALUES ARE IN MICROFARADS.

Figure 10. Sierra 920A Pseudo-Random Generator Synchronizer A6, Schematic Diagram (Sheet 1 of 2)

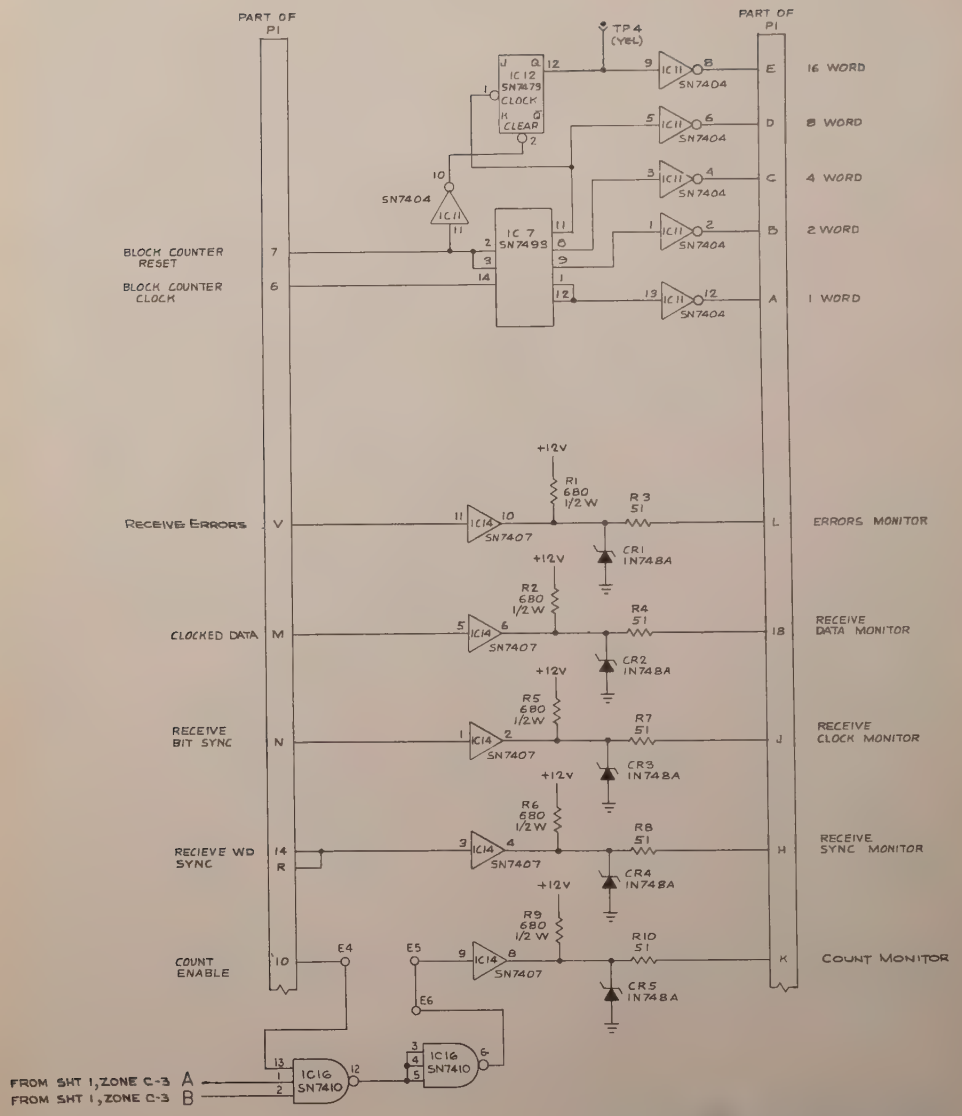


Figure 10. Sierra 920A Pseudo-Random Generator Synchronizer A6, Schematic Diagram (Sheet 2 of 2)

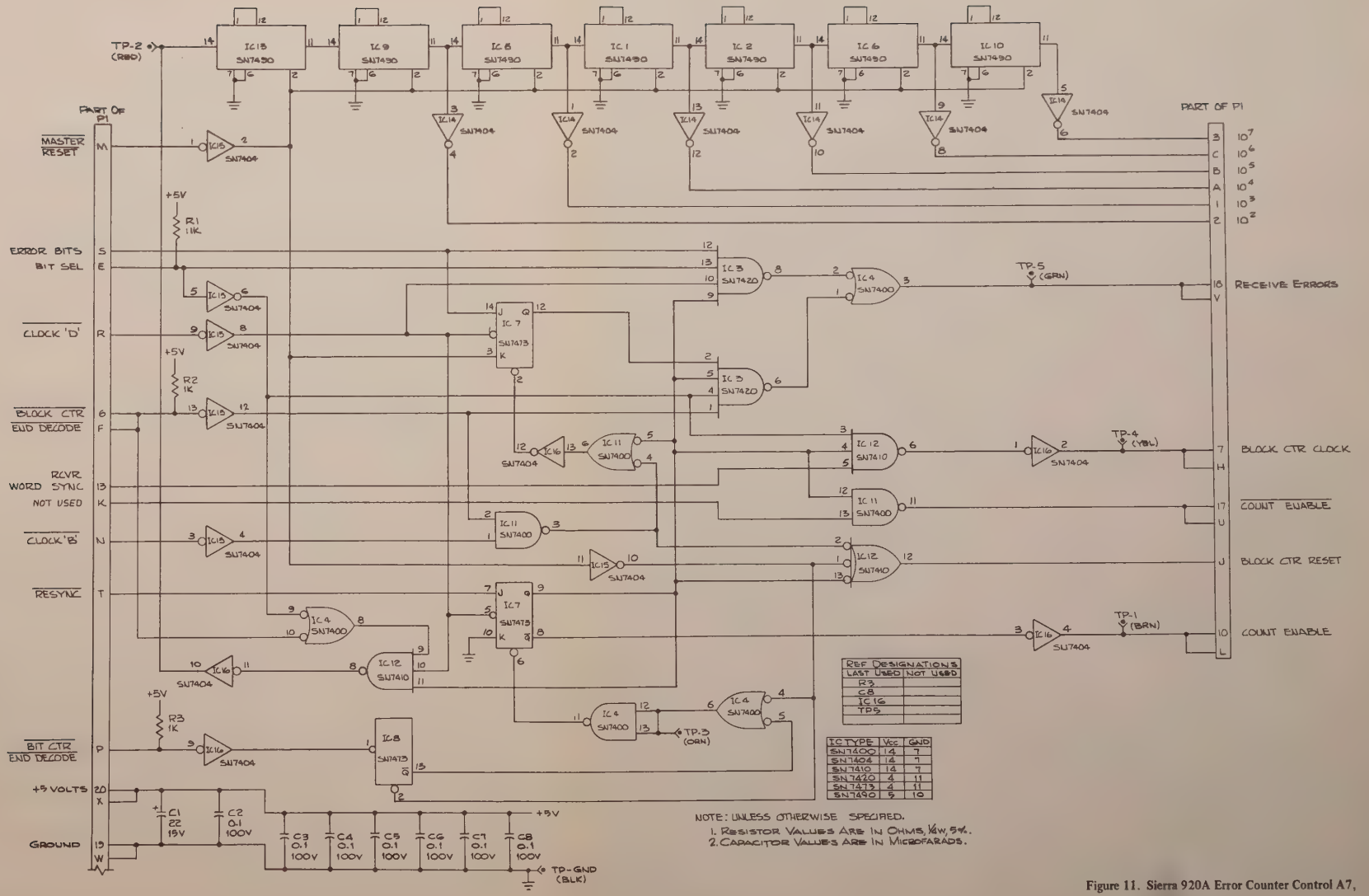
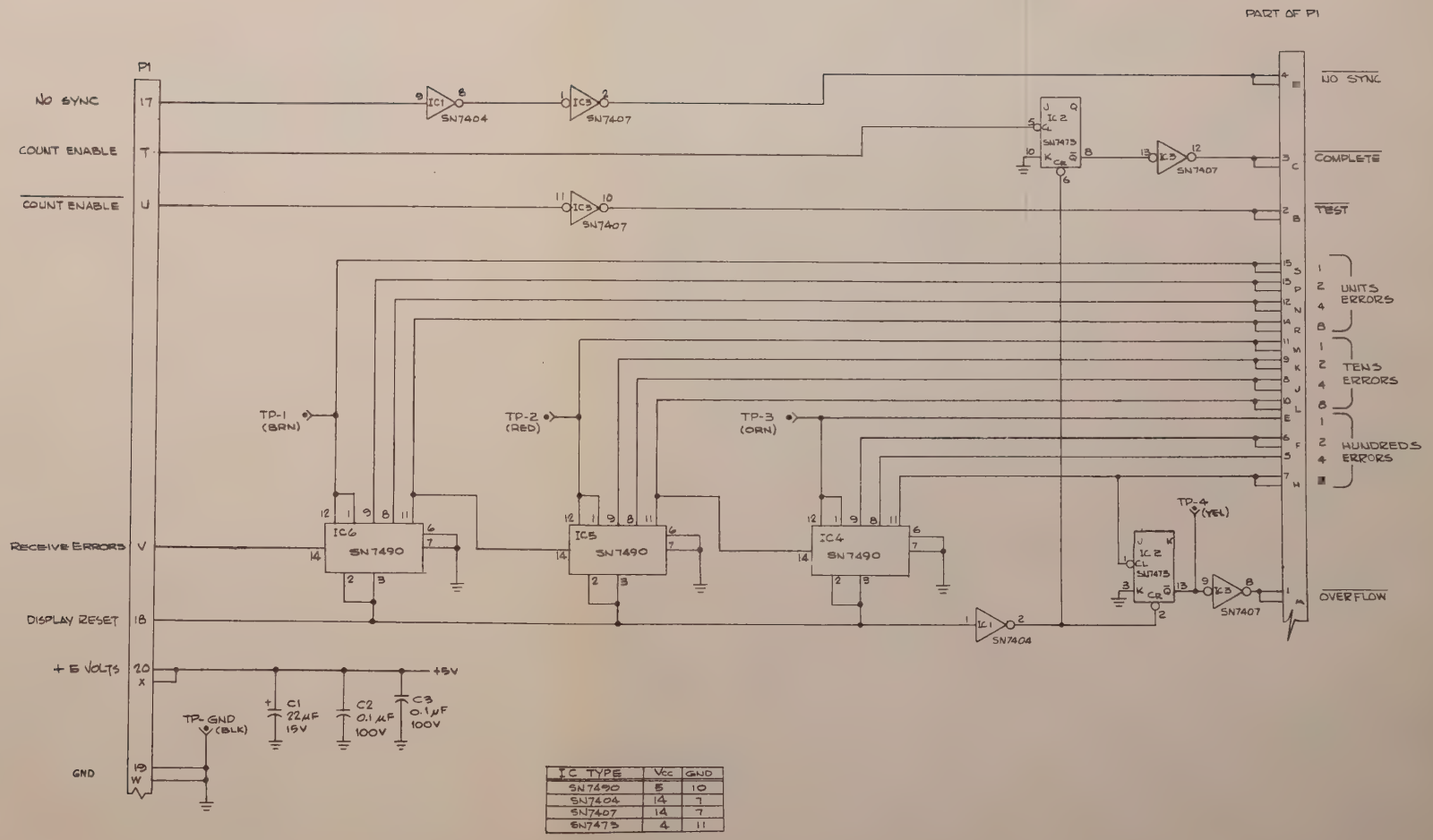


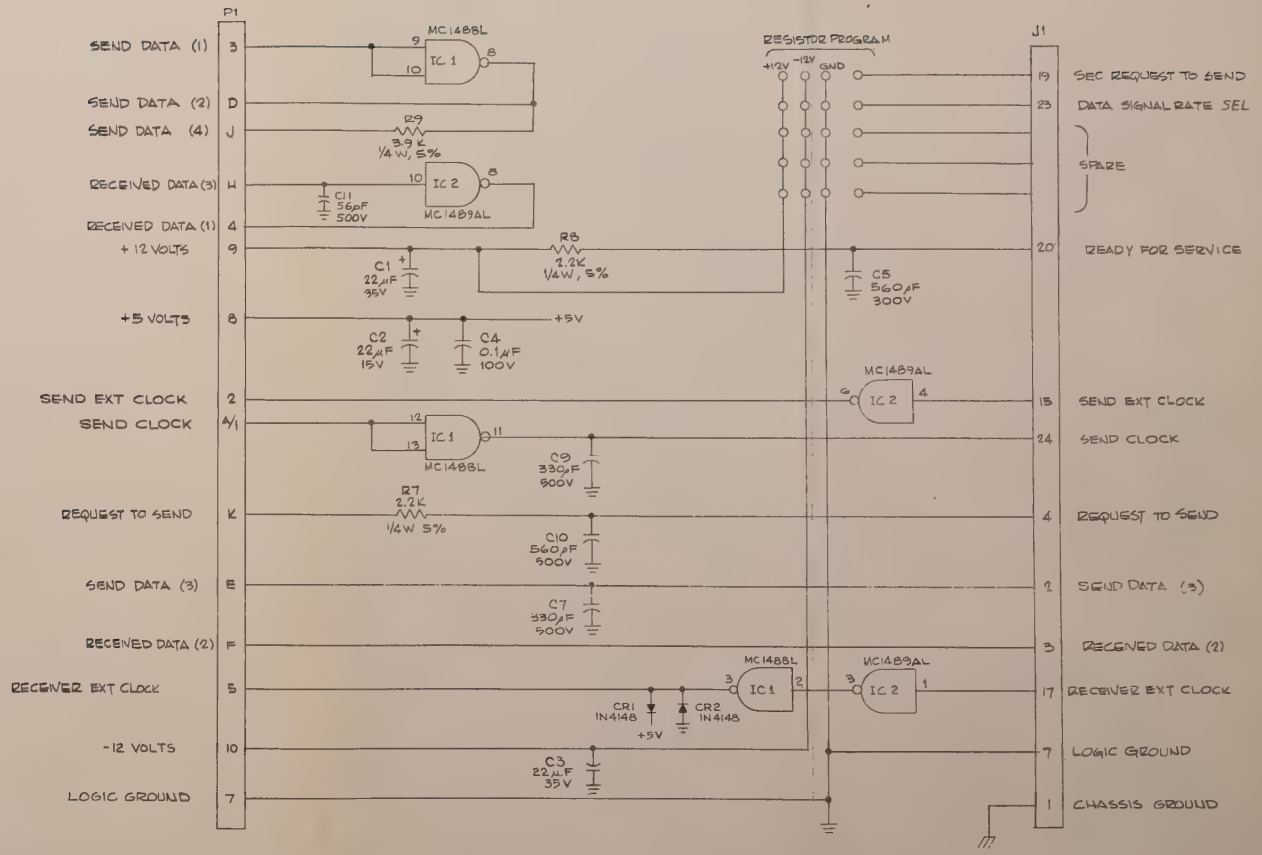
Figure 11. Sierra 920A Error Counter Control A7, Schematic Diagram



IC TYPE	Vcc	GND
SN7490	5	10
SN7404	14	7
SN7407	14	7
SN7473	4	11

Figure 12. Sierra 920A Error Counter A8, Schematic Diagram

L K J H F E D C B A
IC 9 8 7 6 5 4 3 2 1



IC TYPE	+12V	-12V	+5V	GND
MC1488L	14	1	–	7
MC1489AL	–	–	14	7

Figure 13. Sierra 920A EIA Interface A9, Schematic Diagram

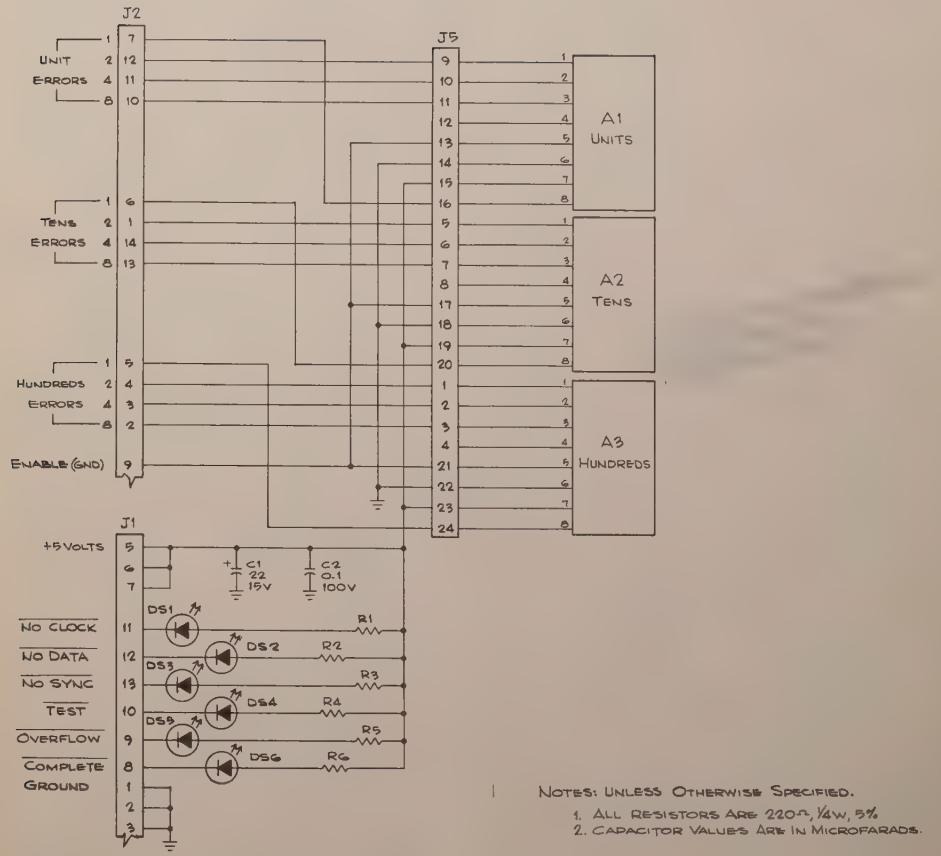
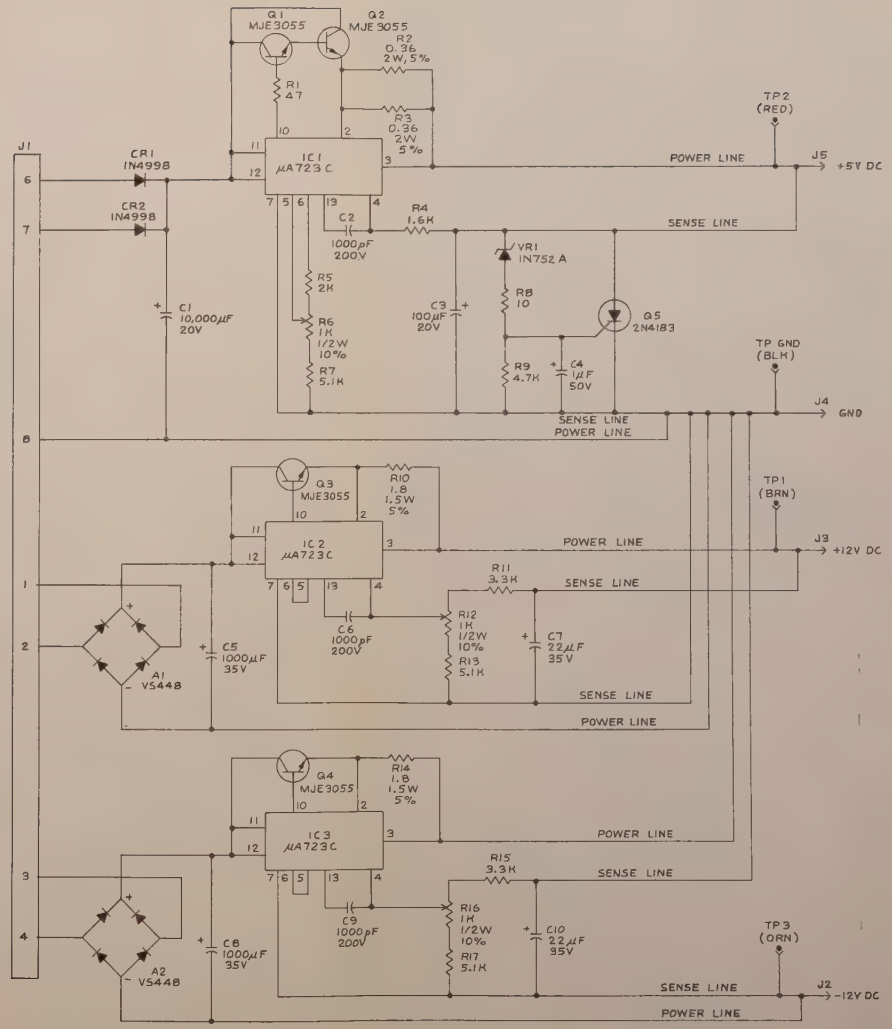


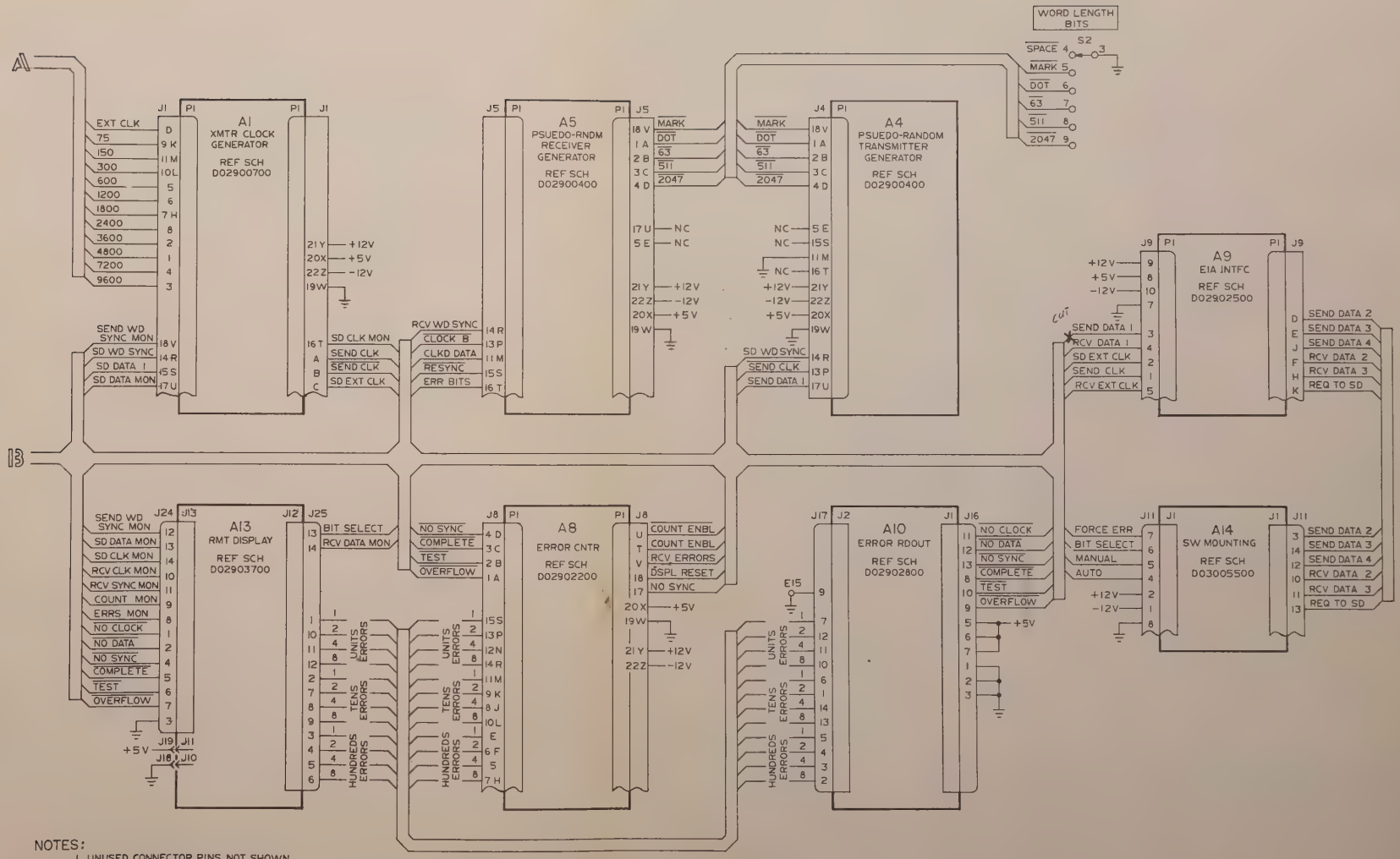
Figure 14. Sierra 920A Error Readout A10, Schematic Diagram



NOTES: UNLESS OTHERWISE SPECIFIED
1. RESISTOR VALUES ARE IN OHMS, 5%, 1/4W.

REF DESIG	
LAST USED	NOT USED
A2	
C10	
CR2	
IC3	
J5	
P1	
Q5	
R17	
TP3	
VR1	

Figure 15. Sierra 920A Power Supply A11, Schematic Diagram



NOTES:
1. UNUSED CONNECTOR PINS NOT SHOWN.
2. ▭ INDICATES EQUIPMENT MARKING.

Figure 16. Sierra 920A Unit Interconnect and A12 Schematic Diagram (Sheet 1 of 2)

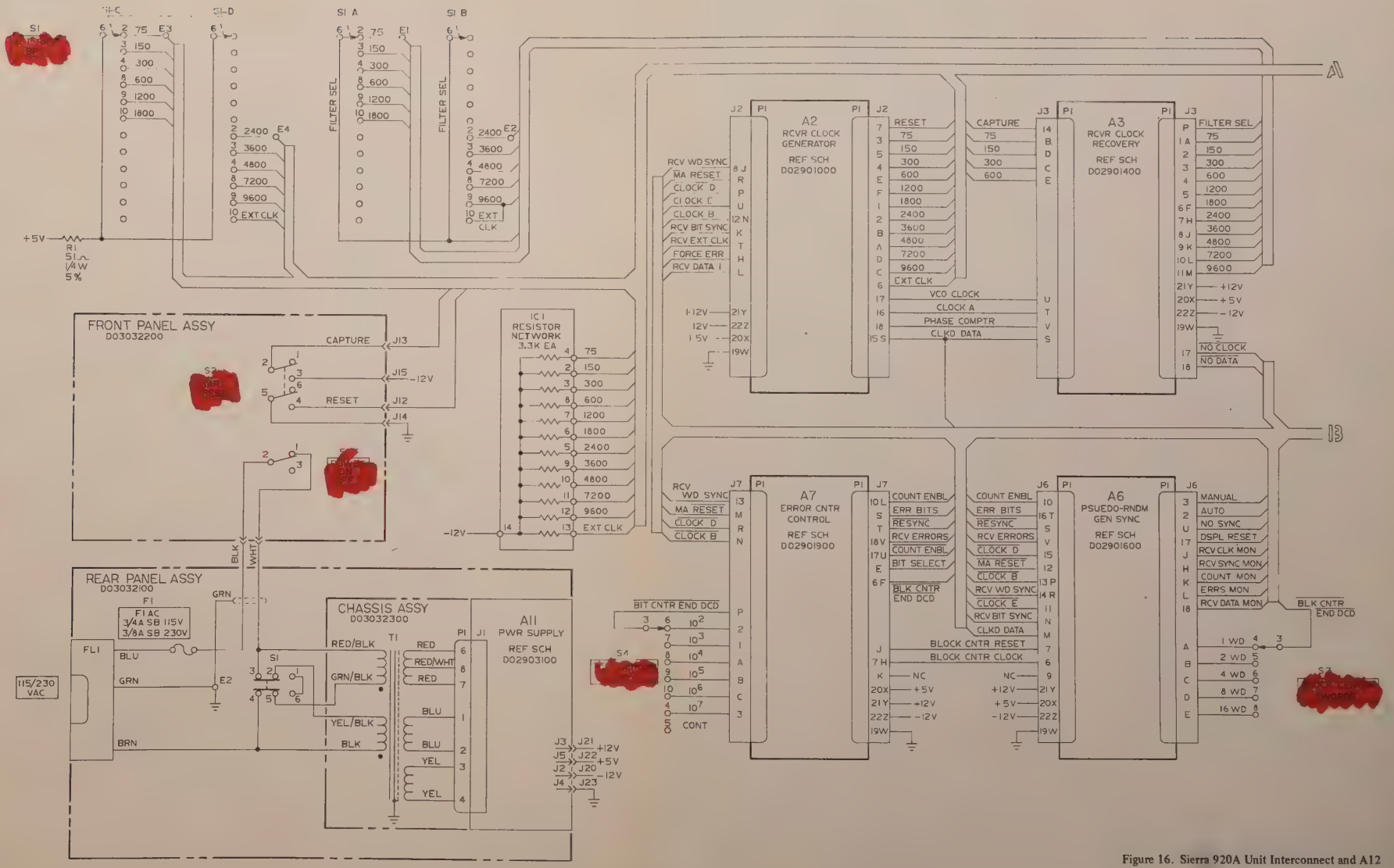
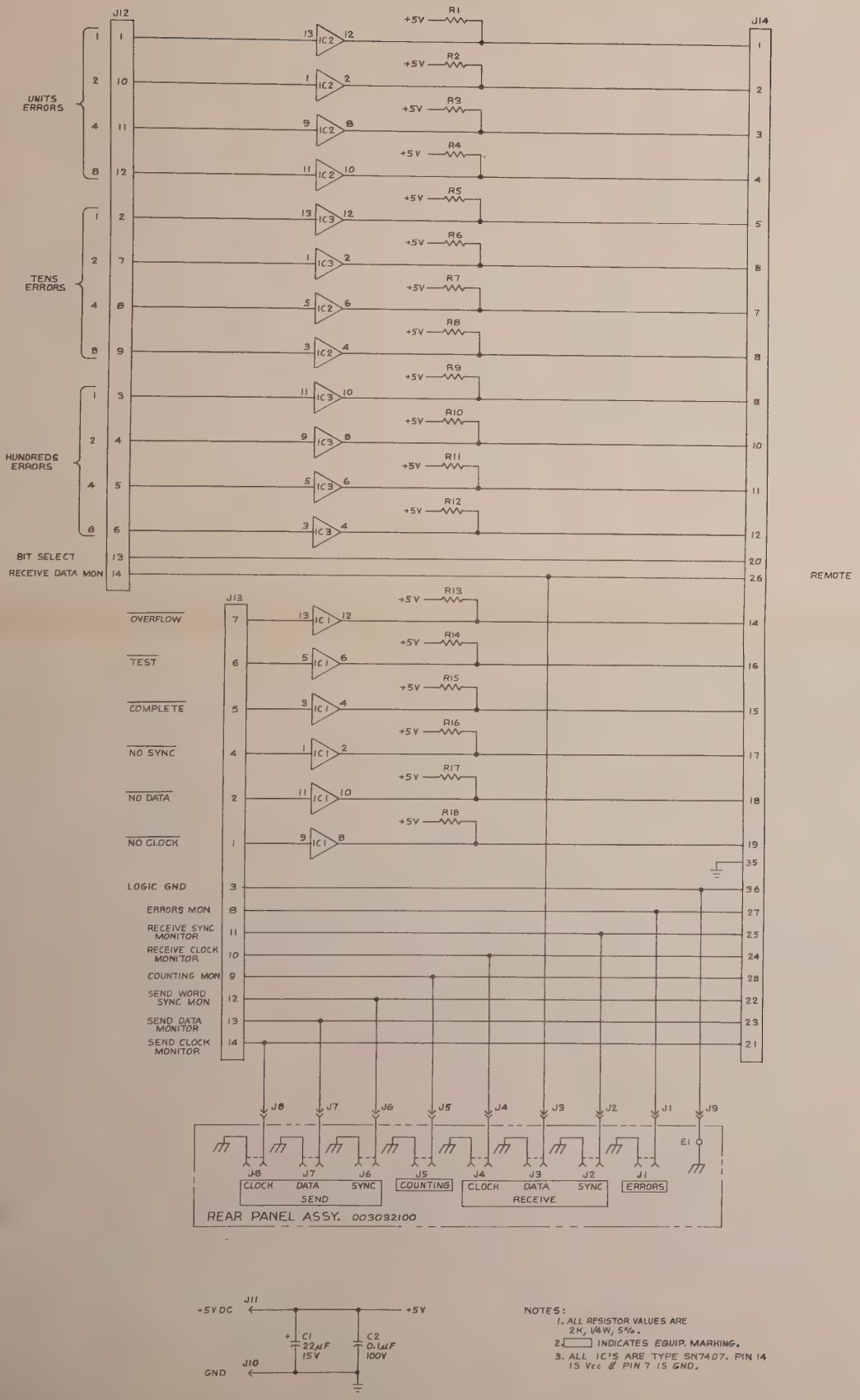


Figure 16. Sierra 920A Unit Interconnect and A12 Schematic Diagram (Sheet 2 of 2)



NOTES:
1. ALL RESISTOR VALUES ARE 2K, ¼W, 5%.
2. ▭ INDICATES EQUIP. MARKING.
3. ALL IC'S ARE TYPE SN7407. PIN 14 IS Vcc & PIN 7 IS GND.

Figure 17. Sierra 920A Remote Display A13, Schematic Diagram

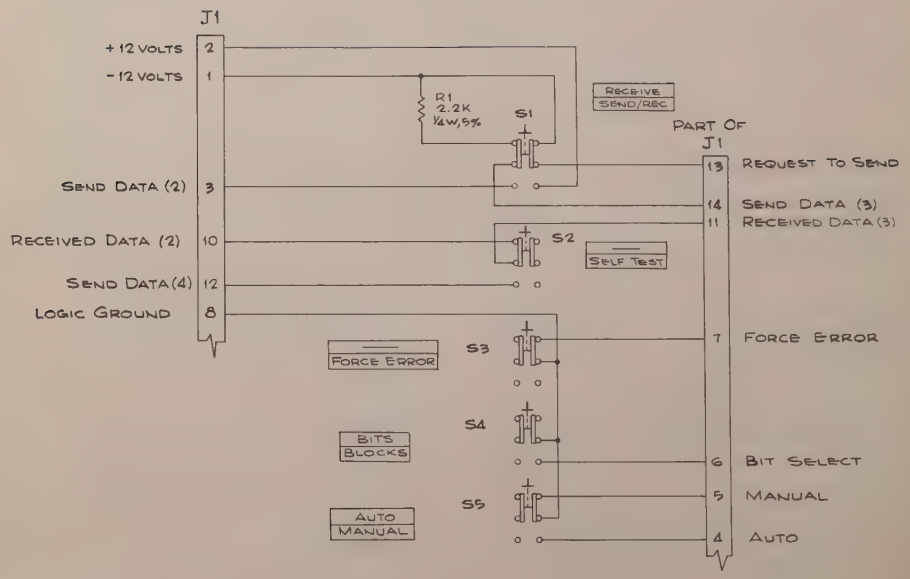


Figure 18. Sierra 920A Mode Switch A14, Schematic Diagram

SECTION 8
REPLACEABLE PARTS LIST

INTRODUCTION

8.01 This section contains a complete listing of all electronic components and mechanical parts subject to normal wearout or failure. Sheet metal parts and common bulk items, such as attaching hardware, wire and cable, and similar items not required for normal maintenance/repair activities are not listed. Detailed descriptions of the column headings are in the following paragraphs.

"REF DESIG"

8.02 This column contains the circuit reference designation of each electronic component in the instrument. The parts are listed in alpha-numeric reference designation sequence. Major modules such as printed circuit board assemblies, oscillator subassemblies, etc., which carry their own assembly designation (A1, A2, etc.) are listed first for reference in their own assembly position, and later in major assembly designation sequence with a complete breakdown of piece parts contained on the major assembly.

"DESCRIPTION"

8.03 This column contains descriptive identification of each assembly/part. This description should always be included when ordering replacement parts. The descriptions contain standardized abbreviations. All abbreviations used are listed in Table 8-1. When a description for an assembly contains the statement "/SEE BREAKDOWN/", it indicates that a complete breakdown of the assembly is provided further on in the parts list.

"SIERRA PART NUMBER"

8.04 This column contains the Sierra drawing number or stock number which is assigned to the part. This number should always be referenced when ordering replacement parts from Sierra.

"FMC"

8.05 This column contains the Federal Manufacturer's Code of the manufacturer of the part. Manufacturer's names and addresses, in numerical order by FMC, are listed in Table 8-2. When the FMC column contains "DESCR", it indicates that no FMC is assigned. The manufacturer's name and address can be found in the DESCRIPTION column.

"DRAWING NO. OR MFG NO."

8.06 This column contains the drawing or part number assigned by the manufacturer listed in the FMC column. This number should always be referenced when ordering replacement parts from the manufacturer. When this column contains "DESCRIPT.", it indicates that the part number was too long to be placed in this column. The part number can be found in the DESCRIPTION column.

"QTY"

8.07 This column gives the quantity of each item in its assembly application. When this column contains "REF", it indicates that a complete breakdown of the assembly is provided further on in the parts list.

"EFFECTIVITY CODE"

8.08 This column is used when more than one configuration of the instrument is being covered by the parts list. An alpha code in this column designates that the item pertains only to certain serial numbers or versions of the instrument. No alpha code in this column indicates that the part is common to all versions. A list of codes and serial numbers/versions will be included in this paragraph when applicable.

ORDERING INFORMATION

8.09 All listed parts may be ordered directly from the manufacturer or from Sierra. When ordering parts from Sierra always include:

1. Sierra Part Number
2. Circuit reference designation, when applicable
3. Description of the part
4. Name, model, and serial number of the instrument

8.10 Replacement parts or further information may be obtained from:

Sierra Electronic Operation
Philco-Ford Corporation
3885 Bohannon Drive
Menlo Park, California 94025
Telephone: (415) 322-7222
TWX: 910-373-1282

Table 8-1. Abbreviations

A	Ampere
BNDG	Binding
BW	Bandwidth
C	Centigrade
CER	Ceramic
COMP	Composition
COAX	Coaxial
COND	Conductor
CPS	Cycles per Second
CRT	Cathode Ray Tube
DB	Decibel
DBL	Double
DEG	Degree
DIP	Dual Inline Package
DPDT	Double Pole Double Throw
ELECT	Electrolytic
FXD	Fixed
ID	Inside Diameter

Table 8-1. Abbreviations (Cont)

IMPED	Impedance
KHZ	Kilohertz
LED	Light Emitting Diode
MA	Milliampere
MAX	Maximum
MFD	Manufactured
MH	Millihenry
NO.	Number
OD	Outside Diameter
PC	Printed Circuit
PCT	Percent
PF	Picofarad
PLSTC	Plastic
P/N	Part Number
PORM	Plus or Minus
POS	Position
PPM	Parts per Million
RF	Radio Frequency
SECT	Section
SPDT	Single Pole Double Throw
SPST	Single Pole Single Throw
UA	Microampere
UF	Microfarad
UH	Microhenry
V	Volt
VAR	Variable
W	Watt
WW	Wire Wound
W/	With

Table 8-2. Federal Manufacturer's Codes

Code	Manufacturer's Name and Address
00141	PIC Design Div., Benrus Corp., P.O. Box 335, Benrus Center, Ridgefield, Conn. 06877
00779	Amp Inc., P.O. Box 3608, Harrisburg, Pa. 17105
00853	Sangamo Electric Co., South Carolina Div., P.O. Box 128, Pickens, S.C. 29761
01121	Allen Bradley Co., 1201 2nd St., Milwaukee, Wis. 53212
01295	Texas Instruments Inc., Components Group, P.O. Box 5012, 13500 N. Central Expressway, Dallas, Tex. 75222
01686	RCL Electronics Div., 195 McGregor St., Manchester, N.H. 03102
02114	Ferroxcube Corp., P.O. Box 359, Mt. Marion Road, Saugerties, N.Y. 12477
02660	The Bunker-Ramo Corp., Amphenol Connector Div., 2801 So. 25th Ave., Broadview, Ill. 60153
02735	PCA Corp., Solid State Div., Route 202, Somerville, N.J. 08876
03508	General Electric Co., Semiconductor Products Dept., Electronics Park, Syracuse, N.Y. 13201
03797	Genisco Technology Corp., Eldema Div., 18435 Susana Rd., Compton, Calif. 90221
03877	Transitron Electronic Corp., 168-186 Albion St., Walsefield, Mass. 01880
04009	Arrow-Hart Inc., 103 Hawthorne St., Hartford, Conn. 06106

Table 8-2. Federal Manufacturer's Codes (Cont)

Code	Manufacturer's Name and Address
04713	Motorola Inc., Semiconductor Products Div., 5005 E. McDowell Rd., Phoenix, Ariz. 85008
05276	Pomona Electronics Co. Inc., P.O. Box 2767, 1500 E. 9th, Pomona, Calif. 91766
05518	Bearing Products Co., 3339 Lancaster Ave., Philadelphia, Penn. 19104
05574	Viking Industries Inc., 21001 Nordhoff, Chatsworth, Calif. 91311
05820	Walsefield Engineering Inc., Audubon Rd., Walsefield, Mass
06560	Airco Speer Electronics Div. of Airco Inc., P.O. Box 1692 Grand Plaza, 945 Grand Ave., Nogales, Ariz. 85621
07263	Fairchild Semiconductor, A Div. of Fairchild Camera and Instrument Corp., 464 Ellis St., Mt. View, Calif. 94040
07793	Cornell-Dubilier Electronic Div., Federal Pacific Electric Co., 4144 Glencoe Ave., Venice, Calif. 90291
07994	American Radionic Co. Inc., 51 Austin, Danbury, Conn. 06810
08289	The Blinn Delbert Co. Inc., 1678 E. Mission Blvd., Pomona, Calif. 91766
08730	Vemaline Products Co.Inc., P.O. Box 3, 455 W. Main St., Wyckoff, N.J. 07481
09023	Cornell-Dubilier Electronics Div., Federal Pacific Electric Co., 2562 Dalrymple, Sanford, N.C. 27330
09353	C and K Components Inc., 103 Morse St., Watertown, Mass. 02172
12498	Teledyne Crystalonics, 147 Sherman St., Cambridge, Mass. 02140
13480	Hughes Electronics Co., 1947 E. 223rd St., Long Beach, Calif. 90810
13862	Alasco Rubber and Plastics Corp., 839 Malcolm Rd., Burlingame, Calif. 94010
14193	Cal-R Inc., 1601 Olympic Blvd., Santa Monica, Calif. 90404
14433	ITT Semiconductors, 3301 Electronics Way, West Palm Beach, Fla. 33401
14655	Cornell-Dubilier Electronics Div. of Federal Pacific Electric Co., 150 Avenue L, Newark, N.J. 07101
14752	Electro Cube Inc., 1710 S. Del Mar Ave., San Gabriel, Calif. 91776
14949	Trompeter Electronics Inc., 8936 Comanche Ave., Chatsworth, Calif. 91311
15801	Fenwal Electronics Div. of Kidde Walter and Co. Inc., 63 Fountain St., Framingham, Mass. 01701
15912	Ansley Electronics Corp., A Subsidiary of Thomas and Betts Corp., 2828 N. Figueroa St., Los Angeles, Calif. 90065
16299	Corning Glass Works, Electronic Component Div., 3900 Electronics Dr., Raleigh, N.C. 27604
17856	Siliconix Inc., 2201 Laurelwood Rd., Santa Clara, Calif. 95054
17870	Edison Electronics Div., McGraw Edison Co., Grenier Field Municipal Airport, Manchester, N.H. 03130
18178	Vactec Inc., 2423 Northline Industrial Blvd., Maryland Heights, Mo. 63043
18324	Signetics Corp., 811 E. Arques, Sunnyvale, Calif. 94086
18796	Erie Technological Products Inc., State College Div., 1900 W. College Ave., State College, Pa. 16801
19701	Mepco/Electra Inc., Electra Div., P.O. Box 760, Mineral Wells, Tex. 76067
21845	Solitron Devices Inc., Transistor Div., 1177 Blue Heron Blvd., Riviera Beach, Fla. 33404
22229	Solitron Devices Inc., 8808 Balboa Ave., San Diego, Calif. 92123
23480	Electronic Hardware Corp., 180-08 Liberty Ave., Jamaica, N.Y. 11433
24248	Southco Inc., Lester, Pa. 19113
26656	Summit Engineering Co., 630 W. 3rd St., Lees Summit, Mo. 64063
26851	Compac Engineering Inc., 398 Commercial St., San Jose, Calif. 95112
27014	National Semiconductor Corp., 2900 San Ysidro Way, Santa Clara, Calif. 95051
27264	Molex Products Co., 5224 Katrine Ave., Downers Grove, Ill. 60515
27556	IMB Electronic Products Inc., 15401 E. Carmenita Rd., Santa Fe Springs, Calif. 90670
27777	Varo Inc., Electronic Devices Div., P.O. Box 1437, 2203 Walnut St., Garland, Tex. 75040
27956	Relcom. 2329 Charleston Rd., Mt. View, Calif. 94040
28480	Hewlett-Packard Co., 1501 Page Mill Rd., Palo Alto, Calif. 94304
29309	Rickey Electronics Inc., P.O. Box 8274, 1305 Dickerson Rd., Nashville, Tenn. 37207
29832	Teledyne Philbrick Nexus, Allied Drive at Route 128, Dedham, Mass. 02026
31356	J-B-T Instruments Inc., 424 Chapel St., P.O. Box 1818, New Haven, Conn. 06508

Table 8-2. Federal Manufacturer's Codes (Cont)

Code	Manufacturer's Name and Address
31918	International Electro Exchange Inc., 8081 Wallace Rd., Eden Prairie, Minn. 55343
44655	Ohmite Manufacturing Co., 3601 W. Howard St., Skokie, Ill. 60076
49956	Raytheon Co., 141 Spring St., Lexington, Mass. 02173
51642	Centre Engineering Inc., P.O. Box P-8, State College, Pa. 16801
55933	Sonotone Corp., Saw Mill River Rd., Elmsford, N.Y. 10523
56289	Sprague Electric Co., North Adams, Mass. 01247
58474	The Superior Electric Co., 383 Middle St., Bristol, Conn. 06010
59730	The Thomas and Betts Co., 36 Butler St., Elizabeth, N.J. 07207
70903	Belden Corp., 415 S. Kilpatrick, Chicago, Ill. 60644
71279	Cambridge Thermionic Corp., 445 Concord Ave., Cambridge, Mass. 02138
71400	Bussman Mfg. Div. of McGraw Edison Co., 2536 W. University St., St. Louis, Mo. 63017
71450	CTS Corp., 1142 W. Beardsley Ave., Elkhart, Ind. 46514
71590	Centralab Electronics Div. of Globe-Union Inc., 5757 N. Green Bay Ave., Milwaukee, Wis. 53201
71785	TRW Electronic Components, Cinch Connector Operations, 1501 Morse Ave., Elk Grove Village, Ill. 60007
72136	The Electro Motive Mfg. Co. Inc., South Park and John St., Willimantic, Conn. 06226
72259	Nytronics, Inc., 10 Pelham Parkway, Pelham Manor, N.Y. 10803
73138	Beckman Instruments Inc., Helipot Div., 2500 Harbor Blvd., Fullerton, Calif. 92634
73734	Federal Screw Products Inc., 3917 N. Kenzie Ave., Chicago, Ill. 60618
74199	Quam Nichols Co., 218 E. Marguette Rd., Chicago, Ill. 60637
75042	TRW Electronic Components, IRC Fixed Resistors, Philadelphia Div., 401 N. Broad St., Philadelphia, Pa. 19108
75523	Landis and Gyo Inc., 4 Westchester Plaza, Elmsford, N.Y. 10523
75915	Littelfuse Inc., 800 E. Northwest Highway, Des Plaines, Ill. 60016
76487	Millen James Mfg. Co. Inc., 150 Exchange St., Malden, Mass. 02148
76493	Bell Industries Inc. J.W. Miller Div., P.O. Box 5825, 19070 Reyes Ave., Compton, Calif. 90224
76854	Oaks Mfg. Co., Div. of Oaks Electro/Netics Corp., S. Main St., Crystal Lake, Ill. 60014
77630	TRW Electronic Components, TRW Electronic Functions, Davis and Copewood St., Camden, N.J. 08103
78189	Illinois Tool Works Inc., Shakeproof Div., St. Charles Rd., Elgin, Ill. 60120
79919	M.H. Rhodes Inc., 99 Thompson Rd., Avon, Conn. 06001
80223	TRW Electronic Components, UTC Transformers, 150 Varick St., New York, N.Y. 10013
80583	The Hammarlund Mfg. Co. Inc., 20 Bridge Ave., Red Banks, N.J. 07701
81071	Schauer Mfg. Corp., 4500 Alpine, Cincinnati, Ohio 45242
81073	Grayhill, Inc., 561 Hillgrove Ave., La Grange, Ill. 60525
81349	Military Specifications
81812	Trimm, Inc., 400 W. Lake, Libertyville, Ill. 60048
82389	Switchcraft, Inc., 5555 N. Elston Ave., Chicago, Ill. 60630
83125	Nytronics Inc., Capacitor Div., Orange St., Darlington, S.C. 29532
83186	Victory Engineering Corp., 128 Springfield Ave., Springfield, N.J. 07081
83330	Herman H. Smith Inc., 812 Snediker Ave., Brooklyn, N.Y. 11207
83930	Adel Products Div. of De Laval Turbine California Inc., 1444 Washington Ave., Huntington, W. Va. 25704
84411	TRW Electronic Components, TRW Capacitors, 112 W. First St., Ogallala, Neb. 69153
90201	Mallory Capacitor Co. Div. of P.R. Mallory and Co. Inc., P.O. Box 372, 3029 E. Washington St., Indianapolis, Ind. 46206
90303	Mallory Battery Co., S. Broadway, Tarrytown, N.Y. 10591
91506	Augat Inc., 33 Perry Ave., Attleboro, Mass. 02703
91637	Dale Electronics Inc., P.O. Box 609, Columbus, Neb. 68601
91737	ITT Gremar Inc., 922 S. Lyon St., Santa Ana, Calif. 92705
94117	Sanders Associates Inc., 95 Canal St., Nashua, N.H. 03060

Table 8-2. Federal Manufacturer's Codes

Code	Manufacturer's Name and Address
94668	Philco-Ford Corp., Sierra Electronic Operation, 3885 Bohannon Dr., Menlo Park, Calif. 94025
95146	Alco Electronic Products Inc., P.O. Box 1348, Lawrence, Mass. 01842
95275	Vitramon, Inc., Box 544, Bridgeport, Conn. 06601
97469	Airco Speer Carbon - Graphite Div. of Airco Inc. Electrode Dept., P.O. Box 412, Packard Rd., Niagra Falls, N.Y. 14302
99392	STM Corp., 2904 Chapman St., Oakland, Calif. 94601
99779	Barnes Division, Bunker Ramo Corp., 24 N. Lansdowne Ave., Lansdowne, Pa. 19050
99800	American Precision Industries Inc., Delevan Division, 270 Quaker Rd., East Aurora, N.Y. 14052

REF DESIG	DESCRIPTION	SIERRA PART NUMBER	FMC	DRAWING NO. OR MFG NO.	QTY	EFFECTIVITY CODE
	SIERRA MODEL 920A ERROR TEST SET	D03032400	94668	D03032400		
	RACK MOUNTING KIT-OPTIONAL	A02838500	94668	A02838500	1	
	BUMPER,NEOPRENE,W/STEEL WASHER	915600009	13862	3083W/3071	4	
	CABLE,POWER,3-COND,8 FT LONG	916400019	70903	17258	1	
	COVER,BOTTOM	D03012100	94668	D03012100	1	
	COVER,TOP	D03012400	94668	D03012400	1	
	COVER,SIDE	D03012300	94668	D03012300	2	
	COVER,SIDE BEZEL	B02842502	94668	B02842502	2	
	FINAL ASSEMBLY /SEE BREAKDOWN/	D03032500	94668	D03032500	REF	
A15	EXTENDER BOARD	C02904200	94668	C02904200	1	
A16	EXTENDER BOARD	C03031800	94668	C03031800	1	
	FINAL ASSEMBLY /BREAKDOWN/	D03032500	94668	D03032500		
	KNOB,DIAL,SKIRTED BAR	916000112	49956	708-3-2G	4	
	CHASSIS ASSEMBLY /SEE BREAKDOWN/	D03032300	94668	D03032300	REF	
	PANEL ASSEMBLY,REAR /SEE BREAKDOWN/	D03032100	94668	D03032100	REF	
	PANEL ASSEMBLY,FRONT /SEE BREAKDOWN/	C03032200	94668	C03032200	REF	
A1	TRANSMITTER CLOCK GENERATOR /SEE BREAKDOWN/	D02900900	94668	D02900900	REF	
A2	RECEIVER CLOCK GENERATOR /SEE BREAKDOWN/	D02901200	94668	D02901200	REF	
A3	RECEIVER CLOCK RECOVERY /SEE BREAKDOWN/	D02901500	94668	D02901500	REF	
A4	PSEUDO-RANDOM GENERATOR /SEE BREAKDOWN/	D02900600	94668	D02900600	REF	
A5	PSEUDO-RANDOM GENERATOR /SEE BREAKDOWN/	D02900600	94668	D02900600	REF	
A6	PSEUDO-RANDOM GENERATOR SYNCHRONIZER /SEE BREAKDOWN/	D02901800	94668	D02901800	REF	
A7	ERROR COUNTER CONTROL /SEE BREAKDOWN/	D02902100	94668	D02902100	REF	
A8	ERROR COUNTER /SEE BREAKDOWN/	D02902400	94668	D02902400	REF	
A9	EIA INTERFACE /SEE BREAKDOWN/	D02902700	94668	D02902700	REF	
	CHASSIS ASSEMBLY /BREAKDOWN/	D03032300	94668	D03032300		
	TRANSFORMER ASSEMBLY	B03032900	94668	B03032900	1	
A12	MASTER INTERCONNECT ASSEMBLY/SEE BREAKDOWN/	D02903600	94668	D02903600	REF	
	PANEL ASSEMBLY,REAR BREAKDOWN/	D03032100	94668	D03032100		
A11	POWER SUPPLY ASSEMBLY /SEE BREAKDOWN/	D02903300	94668	D02903300	REF	
A13	REMOTE DISPLAY /SEE BREAKDOWN/	D02903900	94668	D02903900	REF	
F1	FUSE,CARTRIDGE,SLO-BLO,3/4A	913200029	75915	313750	1	
FL1	FILTER,RF,LINE,1.0A	910100106	94117	EMI-F-0205	1	
J1	CONNECTOR,RECEPTACLE,BNC	914600035	91737	UG-1094/U	1	
J2	CONNECTOR,RECEPTACLE,BNC	914600035	91737	UG-1094/U	1	
J3	CONNECTOR,RECEPTACLE,BNC	914600035	91737	UG-1094/U	1	
J4	CONNECTOR,RECEPTACLE,BNC	914600035	91737	UG-1094/U	1	
J5	CONNECTOR,RECEPTACLE,BNC	914600035	91737	UG-1094/U	1	
J6	CONNECTOR,RECEPTACLE,BNC	914600035	91737	UG-1094/U	1	
J7	CONNECTOR,RECEPTACLE,BNC	914600035	91737	UG-1094/U	1	
J8	CONNECTOR,RECEPTACLE,BNC	914600035	91737	UG-1094/U	1	
S1	TRANSFORMER,FILAMENT	910000040	94668	910000040	1	
XF1	FUSEHOLDER	913400014	75915	342028	1	

REF DESIG	DESCRIPTION	SIERRA PART NUMBER	FMC	DRAWING NO. OR MFG NO.	QTY	EFFECTIVITY CODE
	PANEL ASSEMBLY,FRONT /BREAKDOWN/	C03032200	94668	C03032200		
	WINDOW,DISPLAY	919800031	94668	919800031	1	
A10	ERROR READOUT /SEE BREAKDOWN/	D02903000	94668	D02903000	REF	
A14	SWITCH MOUNTING BRACKET ASSEMBLY /SEE BREAKDOWN/	D03005700	94668	D03005700	REF	
S1	SWITCH,TOGGLE,SPDT	911000059	31356	FH-123	1	
S2	SWITCH,PUSHBUTTON,DPDT,MOMENTARY;P/N F0003-01STD1.12-H4-2U0A	911300052	31918	SEE DESCRIPT.	1	
A1	TRANSMITTER CLOCK GENERATOR /BREAKDOWN/	D02900900	94668	D02900900		
	PRINTED WIRING BOARD	904500491	94668	904500491	1	
	EJECTOR,PC BOARD	920400022	94668	920400022	1	
	CLIP,CRYSTAL	921100012	91506	6156-2-AT	1	
C1	CAPACITOR,FXD,MICA,330PF,PORM 5PCT,500V	901900331	72136	DM15-331J	1	
C2	CAPACITOR,FXD,MICA,100PF,PORM 5PCT,500V	901900101	72136	DM15-101J	1	
C3	CAPACITOR,FXD,MICA,270PF,PORM 5PCT,500V	901900271	72136	DM15-271J	1	
C5	CAPACITOR,FXD,ELECT,1UF,PORM 10PCT,50V, TANTALUM DIELECTRIC,SLEEVED	902760105	81349	CS13BG105K	1	
C6	CAPACITOR,FXD,ELECT,22UF,PORM 10PCT,35V, TANTALUM DIELECTRIC,SLEEVED	902720226	81349	CS13BF226K	1	
C7	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C8	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C9	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C10	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C11	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C12	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
CR1	DIODE,SILICON	910500075	03508	1N4148	1	
CR2	DIODE,SILICON,ZENER	910500089	04713	1N748A	1	
CR3	DIODE,SILICON,ZENER	910500089	04713	1N748A	1	
CR4	DIODE,SILICON,ZENER	910500089	04713	1N748A	1	
IC1	INTEGRATED CIRCUIT,QUAD 2POSITIVE NAND GATE	920300050	01295	SN7400N	1	
IC2	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC3	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
IC5	INTEGRATED CIRCUIT	920300104	94668	920300104	1	
IC6	INTEGRATED CIRCUIT	920300104	94668	920300104	1	
IC7	INTEGRATED CIRCUIT	920300104	94668	920300104	1	
IC8	INTEGRATED CIRCUIT	920300035	01295	SN7490	1	
IC9	INTEGRATED CIRCUIT	920300100	94668	920300100	1	
IC10	INTEGRATED CIRCUIT	920300100	94668	920300100	1	
IC11	INTEGRATED CIRCUIT	920300100	94668	920300100	1	
IC12	INTEGRATED CIRCUIT	920300101	94668	920300101	1	
L1	INDUCTOR,FXD,RF,22MH	909200051	76493	70F222A1	1	
Q1	TRANSISTOR,NPN	910300114	07263	2N5126	1	
Q2	TRANSISTOR,NPN	910300074	04713	2N3904	1	
R1	RESISTOR,FXD,COMP,10K,PORM 5PCT,1/4W	906900103	06560	906900103	1	
R2	RESISTOR,FXD,COMP,10K,PORM 5PCT,1/4W	906900103	06560	906900103	1	
R3	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
R4	RESISTOR,FXD,COMP,4.3K,PORM 5PCT,1/4W	906900432	01121	CB	1	
R8	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/4W	906900681	06560	906900681	1	
R9	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/4W	906900681	06560	906900681	1	
R10	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/2W	905000681	01121	EB	1	
R11	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/2W	905000681	01121	EB	1	
R12	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/2W	905000681	01121	EB	1	

REF DESIG	DESCRIPTION	SIERRA PART NUMBER	FMC	DRAWING NO. OR MFG NO.	QTY	EFFECTIVITY CODE
R13	RESISTOR,FXD,COMP,51 OHM,PORM 5PCT,1/4W	906900510	01121	CB	1	
R14	RESISTOR,FXD,COMP,51 OHM,PORM 5PCT,1/4W	906900510	01121	CB	1	
R15	RESISTOR,FXD,COMP,51 OHM,PORM 5PCT,1/4W	906900510	01121	CB	1	
TPGND	JACK,TEST,PC BOARD,BLACK	915200032	83330	430-103	1	
TP1	JACK,TEST,PC BOARD,BROWN	915200030	83330	430-108	1	
TP2	JACK,TEST,PC BOARD,RED	915200029	83330	430-102	1	
TP3	JACK,TEST,PC BOARD,ORANGE	915200028	83330	430-106	1	
Y1	CRYSTAL,QUARTZ,288KHZ	912200131	94668	912200131	1	
A2	RECEIVER CLOCK GENERATOR /BREAKDOWN/	D02901200	94668	D02901200		
	PRINTED WIRING BOARD	904500503	94668	904500503	1	
	EJECTOR,PC BOARD	920400022	94668	920400022	1	
C1	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C2	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CKO6BX104K	1	
C3	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CKO6BX104K	1	
C4	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CKO6BX104K	1	
C5	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CKO6BX104K	1	
C6	CAPACITOR,FXD,MICA,100PF,PORM 5PCT,500V	901900101	72136	DM15-101J	1	
C7	CAPACITOR,FXD,MICA,100PF,PORM 5PCT,500V	901900101	72136	DM15-101J	1	
C8	CAPACITOR,FXD,ELECT,1UF,PORM 10PCT,50V, TANTALUM DIELECTRIC,SLEEVED	902760105	81349	CS13BG105K	1	
C9	CAPACITOR,FXD,MICA,100PF,PORM 5PCT,500V	901900101	72136	DM15-101J	1	
C10	CAPACITOR,FXD,MICA,100PF,PORM 5PCT,500V	901900101	72136	DM15-101J	1	
CR1	DIODE,SILICON	910500075	03508	1N4148	1	
CR2	DIODE,SILICON	910500075	03508	1N4148	1	
CR3	DIODE,SILICON	910500075	03508	1N4148	1	
IC1	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC2	INTEGRATED CIRCUIT,QUAD 2POSITIVE NAND GATE	920300050	01295	SN7400N	1	
IC3	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
IC4	INTEGRATED CIRCUIT	920300100	94668	920300100	1	
IC5	INTEGRATED CIRCUIT	920300104	94668	920300104	1	
IC6	INTEGRATED CIRCUIT	920300105	94668	920300105	1	
IC7	INTEGRATED CIRCUIT	920300105	94668	920300105	1	
IC8	INTEGRATED CIRCUIT	920300100	94668	920300100	1	
IC9	INTEGRATED CIRCUIT	920300104	94668	920300104	1	
IC10	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC11	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC12	INTEGRATED CIRCUIT	920300100	94668	920300100	1	
IC13	INTEGRATED CIRCUIT	920300104	94668	920300104	1	
IC14	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
IC15	INTEGRATED CIRCUIT,QUAD 2POSITIVE NAND GATE	920300050	01295	SN7400N	1	
R1	RESISTOR,FXD,COMP,10K,PORM 5PCT,1/4W	906900103	06560	906900103	1	
R2	RESISTOR,FXD,COMP,10K,PORM 5PCT,1/4W	906900103	06560	906900103	1	
R3	RESISTOR,FXD,COMP,10K,PORM 5PCT,1/4W	906900103	06560	906900103	1	
R4	RESISTOR,FXD,COMP,10K,PORM 5PCT,1/4W	906900103	06560	906900103	1	
R5	RESISTOR,FXD,COMP,10K,PORM 5PCT,1/4W	906900103	06560	906900103	1	
R6	RESISTOR,FXD,COMP,2.4K,PORM 5PCT,1/4W	906900242	01121	CB	1	
R7	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/4W	906900681	06560	906900681	1	
R8	RESISTOR,FXD,COMP,330 OHM,PORM 5PCT,1/4W	906900331	06560	906900331	1	
R9	RESISTOR,FXD,COMP,47K,PORM 5PCT,1/4W	906900473	06560	906900473	1	
R10	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
TPGND	JACK,TEST,PC BOARD,BLACK	915200032	83330	430-103	1	
TP1	JACK,TEST,PC BOARD,BROWN	915200030	83330	430-108	1	
TP2	JACK,TEST,PC BOARD,RED	915200029	83330	430-102	1	
TP3	JACK,TEST,PC BOARD,ORANGE	915200028	83330	430-106	1	
TP4	JACK,TEST,PC BOARD,YELLOW	915200027	83330	430-107	1	

REF DESIG	DESCRIPTION	SIERRA PART NUMBER	FMC	DRAWING NO. OR MFG NO.	QTY	EFFECTIVITY CODE
A3	RECEIVER CLOCK RECOVERY /BREAKDOWN/	D02901500	94668	D02901500		
	PRINTED WIRING BOARD	904500504	94668	904500504	1	
	EJECTOR,PC BOARD	920400022	94668	920400022	1	
C1	CAPACITOR,FXD,GLASS,0.01UF,PORM 10PCT,50V	902900103	16299	CYK01BT103K	1	
C2	CAPACITOR,FXD,ELECT,100UF,PORM 10PCT,20V, TANTALUM DIELECTRIC,SLEEVED	902740107	81349	CS13BE107K	1	
C3	CAPACITOR,FXD,ELECT,100UF,PORM 10PCT,20V, TANTALUM DIELECTRIC,SLEEVED	902740107	81349	CS13BE107K	1	
C4	CAPACITOR,FXD,ELECT,5UF,PORM 5PCT,6V, TANTALUM DIELECTRIC,SLEEVED,NON-POLARIZED	902710505	56289	151D505X5006X2	1	
C5	CAPACITOR,FXD,ELECT,1UF,PORM 10PCT,50V, TANTALUM DIELECTRIC,SLEEVED	902760105	81349	CS13BG105K	1	
C6	CAPACITOR,FXD,MICA,200PF,PORM 5PCT,300V	901900201	07793	CD7FC201J03	1	
C7	CAPACITOR,FXD,CER,0.022UF,PORM 20PCT,25V	901400223	51642	200100Z5U223M	1	
C8	CAPACITOR,FXD,CER,0.022UF,PORM 20PCT,25V	901400223	51642	200100Z5U223M	1	
C9	CAPACITOR,FXD,CER,4700PF,PORM 10PCT,200V	901300472	95275	CK06BX472K	1	
C10	CAPACITOR,FXD,MICA,200PF,PORM 5PCT,300V	901900201	07793	CD7FC201J03	1	
C11	CAPACITOR,FXD,MICA,200PF,PORM 5PCT,300V	901900201	07793	CD7FC201J03	1	
C12	CAPACITOR,FXD,CER,0.022UF,PORM 20PCT,25V	901400223	51642	200100Z5U223M	1	
C13	CAPACITOR,FXD,CER,0.022UF,PORM 20PCT,25V	901400223	51642	200100Z5U223M	1	
C14	CAPACITOR,FXD,MICA,3300PF,PORM 2PCT,500V	901900332	72136	DM19-332G	1	
C15	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C16	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C17	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C18	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C19	CAPACITOR,FXD,ELECT,330UF,PORM 10PCT,6V, TANTALUM DIELECTRIC,SLEEVED	902700337	81349	CS13BB337K	1	
C20	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C21	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C22	CAPACITOR,FXD,ELECT,22UF,PORM 10PCT,35V, TANTALUM DIELECTRIC,SLEEVED	902720226	81349	CS13BF226K	1	
C23	CAPACITOR,FXD,ELECT,47UF,PORM 10PCT,20V, TANTALUM DIELECTRIC,SLEEVED	902700476	81349	CS13BF476K	1	
C24	CAPACITOR,FXD,ELECT,47UF,PORM 10PCT,20V, TANTALUM DIELECTRIC,SLEEVED	902700476	81349	CS13BF476K	1	
C25	CAPACITOR,FXD,ELECT,47UF,PORM 10PCT,20V, TANTALUM DIELECTRIC,SLEEVED	902700476	81349	CS13BF476K	1	
CR1	DIODE,SILICON	910500100	07263	1N4610	1	
CR2	DIODE,SILICON	910500075	03508	1N4148	1	
CR3	DIODE,SILICON	910500075	03508	1N4148	1	
CR4	DIODE,SILICON	910500075	03508	1N4148	1	
CR5	DIODE,SILICON	910500075	03508	1N4148	1	
CR6	DIODE,SILICON	910500075	03508	1N4148	1	
CR7	DIODE,SILICON	910500100	07263	1N4610	1	
CR8	DIODE,SILICON	910500075	03508	1N4148	1	
CR9	DIODE,GERMANIUM	910500092	13480	1N965	1	
CR10	DIODE,GERMANIUM	910500092	13480	1N965	1	
CR11	DIODE,GERMANIUM	910500092	13480	1N965	1	
CR12	DIODE,GERMANIUM	910500092	13480	1N965	1	
CR13	DIODE,SILICON	910500075	03508	1N4148	1	
CR14	DIODE,SILICON	910500075	03508	1N4148	1	
CR15	DIODE,SILICON	910500075	03508	1N4148	1	
CR16	DIODE,SILICON	910500075	03508	1N4148	1	
CR17	DIODE,SILICON	910500075	03508	1N4148	1	
CR18	DIODE,SILICON	910500075	03508	1N4148	1	
CR19	DIODE,SILICON	910500075	03508	1N4148	1	
CR20	DIODE,SILICON	910500075	03508	1N4148	1	

REF DESIG	DESCRIPTION	SIERRA PART NUMBER	FMC	DRAWING NO. OR MFG NO.	QTY	EFFECTIVITY CODE
CR21	DIODE,SILICON	910500075	03508	1N4148	1	
IC1	TRANSISTOR,PNP	910300087	04713	2N1539A	1	
IC2	INTEGRATED CIRCUIT,OPERATIONAL AMPLIFIER	920300008	07263	U5B7709393	1	
IC3	INTEGRATED CIRCUIT	920300061	07263	U5B771039X	1	
IC4	INTEGRATED CIRCUIT,OPERATIONAL AMPLIFIER	920300084	27014	LM301AH	1	
IC5	INTEGRATED CIRCUIT,OPERATIONAL AMPLIFIER	920300084	27014	LM301AH	1	
K1	RELAY,DRY REED,12V,8500 OHM	912600067	26851	15-1C-12	1	
Q1	TRANSISTOR,NPN	910300036	07263	2N3646	1	
Q2	TRANSISTOR,PNP	910300091	04713	2N3250	1	
Q3	TRANSISTOR,NPN	910300089	04713	2N956	1	
Q4	TRANSISTOR,NPN	910300089	04713	2N956	1	
Q5	TRANSISTOR,PNP	910300091	04713	2N3250	1	
Q6	TRANSISTOR,NPN	910300090	04713	2N718	1	
R1	RESISTOR,FXD,COMP,100 OHM,PORM 5PCT,1/2W	905000101	01121	EB	1	
R2	RESISTOR,FXD,COMP,390 OHM,PORM 5PCT,1/4W	906900391	06560	906900391	1	
R3	RESISTOR,FXD,COMP,390 OHM,PORM 5PCT,1/4W	906900391	06560	906900391	1	
R5	RESISTOR,FXD,COMP,560 OHM,PORM 5PCT,1/2W	905000561	01121	EB	1	
R6	RESISTOR,FXD,FILM,46.4K,PORM 1PCT,1/8W	907304642	91637	MFF1/8	1	
R7	RESISTOR,FXD,FILM,147K,PORM 1PCT,1/8W	907301473	91637	MFF1/8	1	
R8	RESISTOR,FXD,FILM,31.6K,PORM 1PCT,1/8W	907303162	91637	MFF1/8	1	
R9	RESISTOR,FXD,FILM,2.87K,PORM 1PCT,1/4W	908300109	16299	NA60	1	
R10	RESISTOR,FXD,FILM,4.99K,PORM 1PCT,1/8W	907304991	91637	MFF1/8	1	
R11	RESISTOR,FXD,COMP,510 OHM,PORM 5PCT,1/4W	906900511	01121	CB	1	
R12	RESISTOR,FXD,FILM,20.5K,PORM 1PCT,1/8W	907302052	91637	MFF1/8	1	
R13	RESISTOR,VAR,1K,PORM 10PCT,3/4W	907910290	91637	8487-102	1	
R14	RESISTOR,FXD,FILM,4.99K,PORM 1PCT,1/8W	907304991	91637	MFF1/8	1	
R15	RESISTOR,FXD,FILM,3.92K,PORM 1PCT,1/8W	907303921	91637	MFF1/8	1	
R16	RESISTOR,FXD,FILM,36.5K,PORM 1PCT,1/8W	907303652	91637	MFF1/8	1	
R17	RESISTOR,FXD,FILM,301 OHM,PORM 1PCT,1/8W	907303010	91637	MFF1/8	1	
R18	RESISTOR,FXD,FILM,1.00K,PORM 1PCT,1/8W	907301001	91637	MFF1/8	1	
R19	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R20	RESISTOR,FXD,FILM,19.6K,PORM 1PCT,1/8W	907301962	91637	MFF1/8	1	
R21	RESISTOR,FXD,FILM,301 OHM,PORM 1PCT,1/8W	907303010	91637	MFF1/8	1	
R22	RESISTOR,FXD,FILM,3.32K,PORM 1PCT,1/8W	907303321	91637	MFF1/8	1	
R23	RESISTOR,FXD,COMP,220 OHM,PORM 5PCT,1/2W	905000221	01121	EB	1	
R24	RESISTOR,FXD,FILM,3.32K,PORM 1PCT,1/8W	907303321	91637	MFF1/8	1	
R25	RESISTOR,FXD,COMP,51 OHM,PORM 5PCT,1/4W	906900510	01121	CB	1	
R26	RESISTOR,FXD,FILM,1.47K,PORM 1PCT,1/8W	907301471	91637	MFF1/8	1	
R27	RESISTOR,FXD,COMP,5.6K,PORM 5PCT,1/4W	906900562	06560	906900562	1	
R28	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/4W	906900681	06560	906900681	1	
R29	RESISTOR,FXD,FILM,511 OHM,PORM 1PCT,1/8W	907305110	91637	MFF1/8	1	
R30	RESISTOR,FXD,FILM,1K,PORM 1PCT,1/4W	908301001	91637	MFF1/4	1	
R31	RESISTOR,FXD,COMP,3.6K,PORM 5PCT,1/4W	906900362	01121	CB	1	
R32	RESISTOR,FXD,COMP,510 OHM,PORM 5PCT,1/4W	906900511	01121	CB	1	
R33	RESISTOR,FXD,COMP,20K,PORM 5PCT,1/4W	906900203	01121	CB	1	
R34	RESISTOR,FXD,COMP,560 OHM,PORM 5PCT,1/2W	905000561	01121	EB	1	
R35	RESISTOR,FXD,FILM,100 OHM,PORM 1PCT,1/8W	907301000	91637	MFF1/8	1	
R36	RESISTOR,FXD,FILM,20 OHM,PORM 1PCT,1/4W	908300102	16299	NA60	1	
R37	RESISTOR,FXD,COMP,220K,PORM 5PCT,1/4W	906900224	06560	906900224	1	
R38	RESISTOR,FXD,COMP,100 OHM,PORM 5PCT,1/4W	906900101	06560	906900101	1	
R39	RESISTOR,FXD,COMP,33K,PORM 5PCT,1/4W	906900333	06560	906900333	1	
R40	RESISTOR,FXD,COMP,100 OHM,PORM 5PCT,1/4W	906900101	06560	906900101	1	
R41	RESISTOR,FXD,COMP,750 OHM,PORM 5PCT,1/4W	906900751	01121	CB	1	
R42	RESISTOR,FXD,COMP,560 OHM,PORM 5PCT,1/4W	906900561	06560	906900561	1	
R43	RESISTOR,FXD,COMP,390 OHM,PORM 5PCT,1/4W	906900391	06560	906900391	1	
R44	RESISTOR,FXD,COMP,330 OHM,PORM 5PCT,1/4W	906900331	06560	906900331	1	
R45	RESISTOR,FXD,COMP,330 OHM,PORM 5PCT,1/4W	906900331	06560	906900331	1	
R46	RESISTOR,FXD,COMP,330 OHM,PORM 5PCT,1/4W	906900331	06560	906900331	1	
R47	RESISTOR,FXD,COMP,330 OHM,PORM 5PCT,1/4W	906900331	06560	906900331	1	
R48	RESISTOR,FXD,COMP,330 OHM,PORM 5PCT,1/4W	906900331	06560	906900331	1	
R49	RESISTOR,FXD,COMP,330 OHM,PORM 5PCT,1/4W	906900331	06560	906900331	1	
R50	RESISTOR,FXD,COMP,390 OHM,PORM 5PCT,1/4W	906900391	06560	906900391	1	
R51	RESISTOR,FXD,COMP,390 OHM,PORM 5PCT,1/4W	906900391	06560	906900391	1	
R52	RESISTOR,FXD,COMP,270 OHM,PORM 5PCT,1/4W	906900271	06560	906900271	1	
R53	RESISTOR,FXD,COMP,20K,PORM 5PCT,1/4W	906900203	01121	CB	1	

REF DESIG	DESCRIPTION	SIERRA PART NUMBER	FMC	DRAWING NO. OR MFG NO.	QTY	EFFECTIVITY CODE
R54	RESISTOR,FXD,COMP,10K,PORM 5PCT,1/4W	906900103	06560	906900103	1	
TPGND	JACK,TEST,PC BOARD,BLACK	915200032	83330	430-103	1	
TP1	JACK,TEST,PC BOARD,BROWN	915200030	83330	430-108	1	
TP2	JACK,TEST,PC BOARD,RED	915200029	83330	430-102	1	
TP3	JACK,TEST,PC BOARD,ORANGE	915200028	83330	430-106	1	
TP4	JACK,TEST,PC BOARD,YELLOW	915200027	83330	430-107	1	
TP5	JACK,TEST,PC BOARD,GREEN	915200026	83330	430-104	1	
VR1	DIODE,SILICON,ZENER	910500080	04713	1N753A	1	
VR2	DIODE,SILICON,ZENER	910500080	04713	1N753A	1	
VR3	DIODE,SILICON,ZENER	910500080	04713	1N753A	1	
VR4	DIODE,SILICON,ZENER	910500089	04713	1N748A	1	
VR5	DIODE,SILICON,ZENER	910500080	04713	1N753A	1	
VR6	DIODE,SILICON,ZENER	910500080	04713	1N753A	1	
VR8	DIODE,SILICON,ZENER	910500089	04713	1N748A	1	
VR9	DIODE,SILICON,ZENER	910500089	04713	1N748A	1	
A4,5	PSEUDO-RANDOM GENERATOR /BREAKDOWN/	D02900600	94668	D02900600		
	PRINTED WIRING BOARD	904500490	94668	904500490	1	
	EJECTOR,PC BOARD	920400022	94668	920400022	1	
C1	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C2	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C3	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C4	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C5	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C6	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
IC1	INTEGRATED CIRCUIT,QUAD 2POSITIVE NAND GATE	920300050	01295	SN7400N	1	
IC2	INTEGRATED CIRCUIT	920300106	94668	920300106	1	
IC3	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC4	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC5	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC6	INTEGRATED CIRCUIT	920300100	94668	920300100	1	
IC7	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
IC8	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC9	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC10	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC11	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
IC12	INTEGRATED CIRCUIT,TRIPLE 3 INPUT NAND GATE	920300054	01295	SN7410N	1	
IC13	INTEGRATED CIRCUIT,QUAD 2POSITIVE NAND GATE	920300050	01295	SN7400N	1	
IC14	INTEGRATED CIRCUIT	920300104	94668	920300104	1	
IC15	INTEGRATED CIRCUIT	920300103	94668	920300103	1	
R1	RESISTOR,FXD,COMP,2.2K,PORM 5PCT,1/4W	906900222	06560	906900222	1	
R2	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
R3	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
R4	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
R5	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
R6	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
R7	RESISTOR,FXD,COMP,2.2K,PORM 5PCT,1/4W	906900222	06560	906900222	1	
TPGND	JACK,TEST,PC BOARD,BLACK	915200032	83330	430-103	1	
TP1	JACK,TEST,PC BOARD,BROWN	915200030	83330	430-108	1	
TP2	JACK,TEST,PC BOARD,RED	915200029	83330	430-102	1	
TP3	JACK,TEST,PC BOARD,ORANGE	915200028	83330	430-106	1	
TP4	JACK,TEST,PC BOARD,YELLOW	915200027	83330	430-107	1	

REF DESIG	DESCRIPTION	SIERRA PART NUMBER	FMC	DRAWING NO. OR MFG NO.	QTY	EFFECTIVITY CODE
A6	PSEUDO-RANDOM GENERATOR SYNCHRONIZER /BREAKDOWN/	D02901800	94668	D02901800		
	PRINTED WIRING BOARD	904500511	94668	904500511	1	
	EJECTOR,PC BOARD	920400022	94668	920400022	1	
C1	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C2	CAPACITOR,FXD,ELECT,22UF,PORM 10PCT,35V, TANTALUM DIELECTRIC,SLEEVED	902720226	81349	CS13BF226K	1	
C3	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C4	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C5	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C6	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C7	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C8	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C9	CAPACITOR,FXD,ELECT,4.7UF,PORM 10PCT,50V, TANTALUM DIELECTRIC,SLEEVED	902700475	81349	CS13BG475K	1	
C10	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C11	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
CR1	DIODE,SILICON,ZENER	910500089	04713	1N748A	1	
CR2	DIODE,SILICON,ZENER	910500089	04713	1N748A	1	
CR3	DIODE,SILICON,ZENER	910500089	04713	1N748A	1	
CR4	DIODE,SILICON,ZENER	910500089	04713	1N748A	1	
CR5	DIODE,SILICON,ZENER	910500089	04713	1N748A	1	
CR6	DIODE,SILICON	910500075	03508	1N4148	1	
CR7	DIODE,SILICON	910500075	03508	1N4148	1	
IC1	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
IC2	INTEGRATED CIRCUIT,DUAL 4 INPUT,NAND GATE	920300045	01295	SN15930N	1	
IC3	INTEGRATED CIRCUIT,4 BIT BINARY UP/DOWN CVT	920300113	01295	SN74193N	1	
IC4	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC5	INTEGRATED CIRCUIT,QUAD 2POSITIVE NAND GATE	920300050	01295	SN7400N	1	
IC6	INTEGRATED CIRCUIT	920300104	94668	920300104	1	
IC7	INTEGRATED CIRCUIT	920300104	94668	920300104	1	
IC8	INTEGRATED CIRCUIT,QUAD 2POSITIVE NAND GATE	920300050	01295	SN7400N	1	
IC9	INTEGRATED CIRCUIT,QUAD 2POSITIVE NAND GATE	920300050	01295	SN7400N	1	
IC10	INTEGRATED CIRCUIT,TRIPLE 3 INPUT NAND GATE	920300054	01295	SN7410N	1	
IC11	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
IC12	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC13	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
IC14	INTEGRATED CIRCUIT	920300101	94668	920300101	1	
IC15	INTEGRATED CIRCUIT,TIMER	920300112	18324	NE555V	1	
IC16	INTEGRATED CIRCUIT,TRIPLE 3 INPUT NAND GATE	920300054	01295	SN7410N	1	
R1	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/2W	905000681	01121	EB	1	
R2	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/2W	905000681	01121	EB	1	
R3	RESISTOR,FXD,COMP,51 OHM,PORM 5PCT,1/4W	906900510	01121	CB	1	
R4	RESISTOR,FXD,COMP,51 OHM,PORM 5PCT,1/4W	906900510	01121	CB	1	
R5	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/2W	905000681	01121	EB	1	
R6	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/2W	905000681	01121	EB	1	
R7	RESISTOR,FXD,COMP,51 OHM,PORM 5PCT,1/4W	906900510	01121	CB	1	
R8	RESISTOR,FXD,COMP,51 OHM,PORM 5PCT,1/4W	906900510	01121	CB	1	
R9	RESISTOR,FXD,COMP,680 OHM,PORM 5PCT,1/2W	905000681	01121	EB	1	
R10	RESISTOR,FXD,COMP,51 OHM,PORM 5PCT,1/4W	906900510	01121	CB	1	
R11	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
R12	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
R13	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
R14	RESISTOR,FXD,COMP,47K,PORM 5PCT,1/4W	906900473	06560	906900473	1	
R15	RESISTOR,FXD,COMP,47K,PORM 5PCT,1/4W	906900473	06560	906900473	1	
TPGND	JACK,TEST,PC BOARD,BLACK	915200032	83330	430-103	1	
TP1	JACK,TEST,PC BOARD,BROWN	915200030	83330	430-108	1	
TP2	JACK,TEST,PC BOARD,RED	915200029	83330	430-102	1	
TP3	JACK,TEST,PC BOARD,ORANGE	915200028	83330	430-106	1	
TP4	JACK,TEST,PC BOARD,YELLOW	915200027	83330	430-107	1	

REF DESIG	DESCRIPTION	SIERRA PART NUMBER	FMC	DRAWING NO. OR MFG NO.	QTY	EFFECTIVITY CODE
A7	ERROR COUNTER CONTROL /BREAKDOWN/	D02902100	94668	D02902100		
	PRINTED WIRING BOARD	904500502	94668	904500502	1	
	EJECTOR,PC BOARD	920400022	94668	920400022	1	
C1	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C2	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C3	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C4	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C5	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C6	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C7	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C8	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
IC1	INTEGRATED CIRCUIT	920300035	01295	SN7490	1	
IC2	INTEGRATED CIRCUIT	920300035	01295	SN7490	1	
IC3	INTEGRATED CIRCUIT	920300102	94668	920300102	1	
IC4	INTEGRATED CIRCUIT,QUAD 2POSITIVE NAND GATE	920300050	01295	SN7400N	1	
IC5	INTEGRATED CIRCUIT	920300035	01295	SN7490	1	
IC6	INTEGRATED CIRCUIT	920300035	01295	SN7490	1	
IC7	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC8	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC9	INTEGRATED CIRCUIT	920300035	01295	SN7490	1	
IC10	INTEGRATED CIRCUIT	920300035	01295	SN7490	1	
IC11	INTEGRATED CIRCUIT,QUAD 2POSITIVE NAND GATE	920300050	01295	SN7400N	1	
IC12	INTEGRATED CIRCUIT,TRIPLE 3 INPUT NAND GATE	920300054	01295	SN7410N	1	
IC13	INTEGRATED CIRCUIT	920300035	01295	SN7490	1	
IC14	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
IC15	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
IC16	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
R1	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
R2	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
R3	RESISTOR,FXD,COMP,1K,PORM 5PCT,1/4W	906900102	06560	906900102	1	
TPGND	JACK,TEST,PC BOARD,BLACK	915200032	83330	430-103	1	
TP1	JACK,TEST,PC BOARD,BROWN	915200030	83330	430-108	1	
TP2	JACK,TEST,PC BOARD,RED	915200029	83330	430-102	1	
TP3	JACK,TEST,PC BOARD,ORANGE	915200028	83330	430-106	1	
TP4	JACK,TEST,PC BOARD,YELLOW	915200027	83330	430-107	1	
TP5	JACK,TEST,PC BOARD,GREEN	915200026	83330	430-104	1	
A8	ERROR COUNTER /BREAKDOWN/	D02902400	94668	D02902400		
	PRINTED WIRING BOARD	904500492	94668	904500492	1	
	EJECTOR,PC BOARD	920400022	94668	920400022	1	
C1	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C2	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C3	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
IC1	INTEGRATED CIRCUIT,HEX INVERTER	920300087	01295	SN7404N	1	
IC2	INTEGRATED CIRCUIT,DUAL FLIP-FLOP	920300049	01295	SN7473N	1	
IC3	INTEGRATED CIRCUIT	920300101	94668	920300101	1	
IC4	INTEGRATED CIRCUIT	920300035	01295	SN7490	1	
IC5	INTEGRATED CIRCUIT	920300035	01295	SN7490	1	
IC6	INTEGRATED CIRCUIT	920300035	01295	SN7490	1	
TPGND	JACK,TEST,PC BOARD,BLACK	915200032	83330	430-103	1	
TP1	JACK,TEST,PC BOARD,BROWN	915200030	83330	430-108	1	
TP2	JACK,TEST,PC BOARD,RED	915200029	83330	430-102	1	
TP3	JACK,TEST,PC BOARD,ORANGE	915200028	83330	430-106	1	
TP4	JACK,TEST,PC BOARD,YELLOW	915200027	83330	430-107	1	

REF DESIG	DESCRIPTION	SIERRA PART NUMBER	FMC	DRAWING NO. OR MFG NO.	QTY	EFFECTIVITY CODE
A9	EIA INTERFACE /BREAKDOWN/	D02902700	94668	D02902700		
	PRINTED WIRING BOARD	904500512	94668	904500512	1	
	CONNECTOR,SCREW LOCK ASSY,FEMALE	914800222	71785	D-20418-2	2	
C1	CAPACITOR,FXD,ELECT,22UF,PORM 10PCT,35V, TANTALUM DIELECTRIC,SLEEVED	902720226	81349	CS13BF226K	1	
C2	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C3	CAPACITOR,FXD,ELECT,22UF,PORM 10PCT,35V, TANTALUM DIELECTRIC,SLEEVED	902720226	81349	CS13BF226K	1	
C4	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
C5	CAPACITOR,FXD,MICA,560PF,PORM 5PCT,300V	901900561	72136	DM15-561J	1	
C7	CAPACITOR,FXD,MICA,330PF,PORM 5PCT,500V	901900331	72136	DM15-331J	1	
C9	CAPACITOR,FXD,MICA,330PF,PORM 5PCT,500V	901900331	72136	DM15-331J	1	
C10	CAPACITOR,FXD,MICA,560PF,PORM 5PCT,300V	901900561	72136	DM15-561J	1	
C11	CAPACITOR,FXD,MICA,56PF,PORM 5PCT,500V	901900560	72136	DM15-560J	1	
CR1	DIODE,SILICON	910500075	03508	1N4148	1	
CR2	DIODE,SILICON	910500075	03508	1N4148	1	
IC1	INTEGRATED CIRCUIT	920300108	04713	MC1488L	1	
IC2	INTEGRATED CIRCUIT,QUAD LINE RECEIVER	920300109	04713	MC1489AL	1	
J1	CONNECTOR;P/N DB-25S-C33 230-25-61-127	914800141	71785	SEE DESCRIPT.	1	
R7	RESISTOR,FXD,COMP,2.2K,PORM 5PCT,1/4W	906900222	06560	906900222	1	
R8	RESISTOR,FXD,COMP,2.2K,PORM 5PCT,1/4W	906900222	06560	906900222	1	
R9	RESISTOR,FXD,COMP,3.9K,PORM 5PCT,1/4W	906900392	06560	906900392	1	
A10	ERROR READOUT /BREAKDOWN/	D02903000	94668	D02903000		
	PRINTED WIRING BOARD	904500505	94668	904500505	1	
A1	DISPLAY,LED,NUMERICAL INDICATOR	913800053	28480	5082-7300	1	
A2	DISPLAY,LED,NUMERICAL INDICATOR	913800053	28480	5082-7300	1	
A3	DISPLAY,LED,NUMERICAL INDICATOR	913800053	28480	5082-7300	1	
C1	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C2	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
DS1	DIODE,LIGHT EMITTING	910504887	28480	5082-4887	1	
DS2	DIODE,LIGHT EMITTING	910504887	28480	5082-4887	1	
DS3	DIODE,LIGHT EMITTING	910504887	28480	5082-4887	1	
DS4	DIODE,LIGHT EMITTING	910504887	28480	5082-4887	1	
DS5	DIODE,LIGHT EMITTING	910504887	28480	5082-4887	1	
DS6	DIODE,LIGHT EMITTING	910504887	28480	5082-4887	1	
J1	CABLE ASSEMBLY,FLAT,8.0IN.LONG,14 PIN DIP	916400040	15912	203-14-8-2-AA	1	
J2	CABLE ASSEMBLY,FLAT,8.0IN.LONG,14 PIN DIP	916400040	15912	203-14-8-2-AA	1	
J5	SOCKET,INTEGRATED CIRCUIT /MFD BY JERMYN CO.,SAN FRANCISCO,CALIF./	914210059	DESCR	A23-2023/Y	1	
R1	RESISTOR,FXD,COMP,220 OHM,PORM 5PCT,1/4W	906900221	06560	906900221	1	
R2	RESISTOR,FXD,COMP,220 OHM,PORM 5PCT,1/4W	906900221	06560	906900221	1	
R3	RESISTOR,FXD,COMP,220 OHM,PORM 5PCT,1/4W	906900221	06560	906900221	1	
R4	RESISTOR,FXD,COMP,220 OHM,PORM 5PCT,1/4W	906900221	06560	906900221	1	
R5	RESISTOR,FXD,COMP,220 OHM,PORM 5PCT,1/4W	906900221	06560	906900221	1	
R6	RESISTOR,FXD,COMP,220 OHM,PORM 5PCT,1/4W	906900221	06560	906900221	1	
A11	POWER SUPPLY ASSEMBLY /BREAKDOWN/	D02903300	94668	D02903300		
	PRINTED WIRING BOARD	904500506	94668	904500506	1	
	CLAMP,CABLE,STAINLESS STEEL,CUSHIONED, 1 IN.	915300051	83930	432SS-16-6	1	

REF DESIG	DESCRIPTION	SIERRA PART NUMBER	FMC	DRAWING NO. OR MFG NO.	QTY	EFFECTIVITY CODE
	CLIP,SPRING,COMPONENT	921100027	91506	6018-50-A	2	
	HEAT SINK	921300010	05820	207CB	2	
A1	DIODE,RECTIFIER,BRIDGE	910800026	27777	VS448	1	
A2	DIODE,RECTIFIER,BRIDGE	910800026	27777	VS448	1	
C1	CAPACITOR,FXD,ELECT,10,000UF,PLUS 100PCT, MINUS 10PCT	902210109	99392	33C20JS14	1	
C2	CAPACITOR,FXD,CER,1000PF,PORM 10PCT,200V	901320102	95275	CK05BX102K	1	
C3	CAPACITOR,FXD,ELECT,100UF,PORM 10PCT,20V, TANTALUM DIELECTRIC,SLEEVED	902740107	81349	CS13BE107K	1	
C4	CAPACITOR,FXD,ELECT,1UF,PORM 10PCT,50V, TANTALUM DIELECTRIC,SLEEVED	902760105	81349	CS13BG105K	1	
C5	CAPACITOR,FXD,ELECT,1000UF,PLUS 100PCT, MINUS 10PCT,35V /ORDER EPOXY END SEALS/	902250108	99392	33C35GJ13	1	
C6	CAPACITOR,FXD,CER,1000PF,PORM 10PCT,200V	901320102	95275	CK05BX102K	1	
C7	CAPACITOR,FXD,ELECT,22UF,PORM 10PCT,35V, TANTALUM DIELECTRIC,SLEEVED	902720226	81349	CS13BF226K	1	
C8	CAPACITOR,FXD,ELECT,1000UF,PLUS 100PCT, MINUS 10PCT,35V /ORDER EPOXY END SEALS/	902250108	99392	33C35GJ13	1	
C9	CAPACITOR,FXD,CER,1000PF,PORM 10PCT,200V	901320102	95275	CK05BX102K	1	
C10	CAPACITOR,FXD,ELECT,22UF,PORM 10PCT,35V, TANTALUM DIELECTRIC,SLEEVED	902720226	81349	CS13BF226K	1	
CR1	DIODE,RECTIFIER	910800021	04713	1N4998	1	
CR2	DIODE,RECTIFIER	910800021	04713	1N4998	1	
IC1	INTEGRATED CIRCUIT	920300107	94668	920300107	1	
IC2	INTEGRATED CIRCUIT	920300107	94668	920300107	1	
IC3	INTEGRATED CIRCUIT	920300107	94668	920300107	1	
J1	CONNECTOR,PC BOARD,8 PIN	914800203	27264	09-60-1081	1	
Q1	TRANSISTOR,NPN	910300100	04713	MJE3055	1	
Q2	TRANSISTOR,NPN	910300100	04713	MJE3055	1	
Q3	TRANSISTOR,NPN	910300100	04713	MJE3055	1	
Q4	TRANSISTOR,NPN	910300100	04713	MJE3055	1	
Q5	TRANSISTOR,SILICON CONTROLLED RECTIFIER	910300088	04713	2N4183	1	
R1	RESISTOR,FXD,COMP,47 OHM,PORM 5PCT,1/4W	906900470	06560	906900470	1	
R2	RESISTOR,FXD,WW,0.36 OHM,PORM 5PCT,2W	906200003	75042	BWH	1	
R3	RESISTOR,FXD,WW,0.36 OHM,PORM 5PCT,2W	906200003	75042	BWH	1	
R4	RESISTOR,FXD,COMP,1.6K,PORM 5PCT,1/4W	906900162	01121	CB	1	
R5	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R6	RESISTOR,VAR,1K,PORM 10PCT,15-TURN	907900290	73138	89PR1K	1	
R7	RESISTOR,FXD,COMP,5.1K,PORM 5PCT,1/4W	906900512	06560	906900512	1	
R8	RESISTOR,FXD,COMP,10 OHM,PORM 5PCT,1/4W	906900100	01121	CB	1	
R9	RESISTOR,FXD,COMP,4.7K,PORM 5PCT,1/4W	906900472	06560	906900472	1	
R10	RESISTOR,FXD,WW,1.8 OHM,PORM 5PCT,1.5W	906200018	44655	995-1A-4036	1	
R11	RESISTOR,FXD,COMP,3.3K,PORM 5PCT,1/4W	906900332	06560	906900332	1	
R12	RESISTOR,VAR,1K,PORM 10PCT,15-TURN	907900290	73138	89PR1K	1	
R13	RESISTOR,FXD,COMP,5.1K,PORM 5PCT,1/4W	906900512	06560	906900512	1	
R14	RESISTOR,FXD,WW,1.8 OHM,PORM 5PCT,1.5W	906200018	44655	995-1A-4036	1	
R15	RESISTOR,FXD,COMP,3.3K,PORM 5PCT,1/4W	906900332	06560	906900332	1	
R16	RESISTOR,VAR,1K,PORM 10PCT,15-TURN	907900290	73138	89PR1K	1	
R17	RESISTOR,FXD,COMP,5.1K,PORM 5PCT,1/4W	906900512	06560	906900512	1	
TPGND	JACK,TEST,PC BOARD,BLACK	915200032	83330	430-103	1	
TP1	JACK,TEST,PC BOARD,BROWN	915200030	83330	430-108	1	
TP2	JACK,TEST,PC BOARD,RED	915200029	83330	430-102	1	
TP3	JACK,TEST,PC BOARD,ORANGE	915200028	83330	430-106	1	
VR1	DIODE,SILICON,ZENER	910500106	04713	1N752A	1	
A12	MASTER INTERCONNECT ASSEMBLY /BREAKDOWN/	D02903600	94668	D02903600		
	PRINTED WIRING BOARD	904500507	94668	904500507	1	
IC1	RESISTOR MODULE,14DIP W/13 3.3K RESISTORS	919900068	73138	899-1-R3.3K	1	
J1	CONNECTOR,PC BOARD,22/44 PIN	914800170	05574	2VH22/1AV5	1	
J2	CONNECTOR,PC BOARD,22/44 PIN	914800170	05574	2VH22/1AV5	1	

REF DESIG	DESCRIPTION	SIERRA PART NUMBER	FMC	DRAWING NO. OR MFG NO.	QTY	EFFECTIVITY CODE
J3	CONNECTOR,PC BOARD,22/44 PIN	914800170	05574	2VH22/1AV5	1	
J4	CONNECTOR,PC BOARD,22/44 PIN	914800170	05574	2VH22/1AV5	1	
J5	CONNECTOR,PC BOARD,22/44 PIN	914800170	05574	2VH22/1AV5	1	
J6	CONNECTOR,PC BOARD,22/44 PIN	914800170	05574	2VH22/1AV5	1	
J7	CONNECTOR,PC BOARD,22/44 PIN	914800170	05574	2VH22/1AV5	1	
J8	CONNECTOR,PC BOARD,22/44 PIN	914800170	05574	2VH22/1AV5	1	
J9	CONNECTOR,PC BOARD,RIGHT ANGLE,10/20 PIN	914800186	05574	2VH10/1AKC15	1	
J10	SOCKET,INTEGRATED CIRCUIT	914200055	99779	121-25011-144	1	
J11	SOCKET,INTEGRATED CIRCUIT	914200055	99779	121-25011-144	1	
J16	SOCKET,INTEGRATED CIRCUIT	914200055	99779	121-25011-144	1	
J17	SOCKET,INTEGRATED CIRCUIT	914200055	99779	121-25011-144	1	
J24	CABLE ASSEMBLY,FLAT,12.0IN.LONG,14 PIN DIP	916400049	15912	614004-7-122A	1	
J25	CABLE ASSEMBLY,FLAT,12.0IN.LONG,14 PIN DIP	916400049	15912	614004-7-122A	1	
R1	RESISTOR,FXD,COMP,51 OHM,PORM 5PCT,1/4W	906900510	01121	CB	1	
S1	SWITCH,ROTARY,1POLE,12POS,4SECT	911200219	94668	911200219	1	
S2	SWITCH,ROTARY,1POLE,6POS,1SECT	911200220	94668	911200220	1	
S3	SWITCH,ROTARY,1POLE,5POS,1SECT	911200221	94668	911200221	1	
S4	SWITCH,ROTARY,1POLE,7POS,1SECT	911200222	94668	911200222	1	
A13	REMOTE DISPLAY /BREAKDOWN/	D02903900	94668	D02903900		
	PRINTED WIRING BOARD	904500508	94668	904500508	1	
C1	CAPACITOR,FXD,ELECT,22UF,PORM 20PCT,15V, TANTALUM DIELECTRIC,SLEEVED	902740226	81349	CS13BD226M	1	
C2	CAPACITOR,FXD,CER,0.1UF,PORM 10PCT,100V	901330104	81349	CK06BX104K	1	
IC1	INTEGRATED CIRCUIT	920300101	94668	920300101	1	
IC2	INTEGRATED CIRCUIT	920300101	94668	920300101	1	
IC3	INTEGRATED CIRCUIT	920300101	94668	920300101	1	
J12	SOCKET,INTEGRATED CIRCUIT	914200055	99779	121-25011-144	1	
J13	SOCKET,INTEGRATED CIRCUIT	914200055	99779	121-25011-144	1	
J14	CONNECTOR,SOCKET,BLUE RIBBON,36 CONTACT	914900005	71785	57-40360	1	
R1	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R2	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R3	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R4	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R5	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R6	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R7	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R8	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R9	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R10	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R11	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R12	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R13	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R14	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R15	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R16	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R17	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
R18	RESISTOR,FXD,COMP,2K,PORM 5PCT,1/4W	906900202	06560	906900202	1	
A14	SWITCH MOUNTING BRACKET ASSEMBLY /BREAKDOWN/	D03005700	94668	D03005700		
	PRINTED WIRING BOARD	904500509	94668	904500509	1	
J1	CABLE ASSEMBLY,FLAT,8.0IN.LONG,14 PIN DIP	916400040	15912	203-14-8-2-AA	1	
R1	RESISTOR,FXD,COMP,2.2K,PORM 5PCT,1/4W	906900222	06560	906900222	1	
S1-5	SWITCH,PUSHBUTTON,DPDT,10-STATION;P/N 10XF-12.5STD-FA100/BLK-ORG-2VEE,STA2,4,5,7,9BLNK	911300053	31918	SEE DESCRIPT.	1	

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